

FAR EASTERN ECONOMIC REVIEW

VOL. X

Hongkong, January 18, 1951

No. 3

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A NEW PHASE IN JAPAN

By E. Stuart Kirby

By the beginning of 1948, the basic tasks of the Allied Occupation of Japan—i.e. imposing full demilitarisation, and establishing the essentials of democratisation—were officially declared to have been completed. It is interesting to note that the military occupation of Japan had originally been intended to last for two years. Thus the original expectations had apparently been broadly fulfilled, as far as internal progress in Japan was concerned. There seems however to have been no such accurate judgment of the conditions in the world outside: when 1948 came, it was patently impossible to leave Japan altogether, in a world which seemed to have slipped back into hostilities and dangers worse than those of ten years earlier. So a "Second Phase" of the Occupation of Japan began: and it is quite unforeseeable how long Allied commitments in Japan must continue.

In any criticism of American policies, in particular, it is necessary and salutary always to bear strongly in mind two points. One is that the United States policy (now so much denounced by the Chinese Government) was absolutely based on the postulate that China would naturally come forward to take up a moral and material leadership in the Far East, in her own right. If China had taken the constructive part expected of her, Japan would have constituted no awkward problem, and the whole of the Far East would by now have been enjoying a peaceful development—boom. Unfortunately one Chinese government has proved totally incapable, and its successor fanatically unwilling, to live up to this historic opportunity. The other point is that if the mind of

Russia had not been so addled with a doctrine which insists on attributing the lowest and crudest motives to everyone and in believing that world war is inevitable (and even desirable, as a means of general "liberation") the Soviet Government could, by simply biding its time, have sat back and seen the Americans by 1949 completely withdrawn from Asia, in the military and strategic sense. Dictators, in their own time, are always credited with almost superhuman foresight and cunning; but the verdict of history is usually that they blind themselves as much as they blind others, that they always overcall their hands, and call them too soon.

So Japan remains a problem—through no choosing of the American Government or people, to whom the heavy expenditure, home taxation and diversion of resources for the continued support of the Japanese economy and administration have been extremely distasteful. These facts have imposed on the "Second Phase" of the Occupation of Japan a special and novel character. The first phase comprised the initial "police" and judiciary measures, and the laying-down of a general framework of political, social and economic institutions of a democratic type, to show the Japanese how such things were done, and to teach them increasingly to operate them themselves. Apt pupils and imitators always, the Japanese progressed rapidly in that direction, with dignity as well as discipline. But one unwritten law of the Second Phase is that Japan is to "pay her own way," unsubsidised, from now on; it is being increasingly realised, as a corollary, that Japan can and should play as important and very

useful part in any general policy of Asian Economic Development. Thus there is a shift from tutelage towards partnership, and from general supervision towards practical planning.

This broadly suits everyone except the Communists, who wish to maximise distress and disorder in Asia, as prerequisites for revolution. The Far Eastern Commission, which is the inter-Allied control body for Japan, has lately much dropped in status and effectiveness; the Soviet member has done all he could to nullify it by the techniques of filibustering, veto and walk-out, and has lately preferred the procedure of writing critical "open letters" to General MacArthur, published in the press. The British Commonwealth and other Allied members still support the Commission, as a necessary and valuable means of protecting their countries on points where they fear unfair Japanese competition or ill-adjusted economic relations. (It is fair to add, at the same time, that the "decline" of the Commission is also very much due to the fact that it functioned so much better in its first years that it had by 1948 made most of the decisions and clarifications expected of it, so now it has naturally less work to do).

* * *

One question which is more or less settled is that of the restitution of direct Japanese war-booty (i.e. the return of looted property, as distinct from reparations, which are claims for destruction or damage inflicted). The original ruling (of the F.E.C. in 1946) only ordered the return of Allied property which was in the occupied countries "at the time of" the Japanese occupation; and it placed the burden of proof entirely on the claimants. It was not till

1948 that this too limited scheme was extended, to include assets looted "during the period" of Japanese occupation (including raw materials removed, etc.), and to facilitate the reasonable proof of claims. SCAP was empowered to sell all the assets in question and placed the proceeds in a "secured fund" used as a credit base for trade operations in which creditor countries would share in proportion to their claims. Some US\$50 millions worth of commodities has been returned in kind or equivalent (chiefly metals and rubber), and some 80 seized ships found in Japan have returned, after full repair and refitting at Japanese expense. Only a small amount of looted property remains unclaimed, to be divided by quota among the Powers.

In another category is the question of business property owned by Allied nationals in Japan, sequestered at the outbreak of war. From an early decision of the F.E. Commission, Allied nationals were allowed to resume these property rights. But few have done so; the assets in question impinges on the problem of reparations proper—i.e. payment for damage attributable to Japanese war-guilt. Claims for compensation for damage or misuse of such Allied property total at least 50,000,000,000 Yen, perhaps twice as much, according to various estimates. Since the utilisation of this foreign business property could make a considerable contribution to Japan's productivity, the expectation is now arising in the conditions of the "Second Phase," that a settlement removing some of the obstacles to the reactivation of this property will be forthcoming.

The huge sum just mentioned for damages on this property (50 to 100 American billions of Yen, i.e. 50-100 million £ sterling) can however hardly be expected to be forthcoming. This must be considered in conjunction with the problem of reparations in general. In the first phase of the Occupation, no wide enforcement of reparations appeared likely, for the reason that the issue was inextricably bound up with that of the "level of industry": no definitive decision seemed to be attainable as to exactly what scale of economy would or should be allowed to Japan, hence of what residue might figure for distribution as reparations. It may be noted that some not inconsiderable reparations were nevertheless collected; following an "interim" order of 1947, about 15,000 units of machine tools and some other industrial material

(value about US\$40 million) were sent to China (\$20 mn), the Philippines (\$8 mn.), Holland and Indonesia (\$5 mn), and British territories (\$7 mn). But the U.S. has been increasingly firm in its opposition to any further exaction of reparations, and the Second Phase of the Occupation has this for another of its fundamental conditions. The taking of reparations would quantitatively reduce Japan's ability to support herself; qualitatively, it might make stabilisation impossible. Japan has already met a considerable part of the reparations bill, in the sense that Japanese assets overseas have been seized on that account; the total value of these is no less than US\$3,000 million. These arguments, and the over-riding need to have Japan become self-sustaining—and indeed more, a net contributor to world production—have been firmly reiterated by the findings of successive official missions and by conclusive governmental decisions. Thus Reparations is another question that is practically closed.

* * *

In the first phase of the Occupation, important reforms were promoted; but, generally speaking, it is easy to see in retrospect that, for the rest, the Occupation only stepped in when and where the Japanese failed in some important practical matter—such as the production of food or materials, fiscal administration, etc. The Second Phase necessitates quite the opposite: positive concern and participation by the Occupation, at all points. Gone is the outlook which once seemed typical of the Allied personnel: "the Japanese got themselves into this position, they can get themselves out, we just keep the ring;"

In July 1947 the United States proposed a Japanese Peace Conference. The proposal was flatly rejected by the Soviet Union. In January 1948 the U.S. Government declared fully for "the early revival of the Japanese economy on a peaceful, self-supporting basis." The Young Mission followed in the spring; it called for immediate stabilisation measures. A Ten-Point Program to this end, which followed, was inadequately applied by the Japanese Government; some industrial progress was recorded in 1948, but American aid to Japan for that year was \$350 million. SCAP turned to more "forcible" measures. A new Japanese government, under Mr. Yoshida, proved more effective for this purpose. The Dodge Mission

(early 1949) showed what should be done, and how to do it. Mr. Dodge aptly described Japan as having a "rigged economy"—propped on the one hand externally by American aid and on the other internally by an elaborate structure of governmental subsidies and price supports. His recommendations brought a rapid unrigging. The budget was balanced. A single exchange rate for the Yen was established. An entirely new accounting was enforced in respect of American aid, enabling a better distinction and utilisation for special purposes, instead of its simply going into a general pool. Controls on raw materials, credit and financing were greatly improved. This represented in effect a thorough and drastic scheme of rationalisation, in both senses of the word—an improvement and simplification of the industrial and trade structure, and the adoption of a more reasonable and logical position for Japan in the world economy.

Mention must also be made of the Shoup Mission (mid 1949) and the rationalisation of the Japanese tax system which followed upon its recommendations.

At the end of 1949, all export trade was returned to private enterprise. The first half of 1950 brought no new organisational developments which need be noted here; general progress continued, in the same directions. Then World Communism struck, in Korea, its first great blow at international peace and progress. Russian fear and chagrin at the progress of economic rehabilitation in Asia and the approach of an agreed peace settlement in that area have surely been too often and too frantically expressed for anyone to doubt that they were the main motivations of the Communist aggression in Korea.

* * *

The purpose of this article is not to make a survey of the recent history, but to emphasise the changed position in regard to Japan. What inferences may be drawn as to the future course of Japan's economic relations with other countries? Encouragement of foreign investment in Japan is a possibility; Communist propaganda notwithstanding, there has been practically none, and the reforms following the Shoup Mission's visit mean heavy Japanese taxes on foreign earnings. A revival of Japanese shipping is likely; this is a potential source of "invisible earnings" and of possible contribu-

tion to the general development of Eastern Asia, in which Japan's existing capacity is obviously under-employed. Considerable improvements are planned in the utilisation of the indigenous resources in food and materials of the Japanese islands themselves, but obviously the main "drive" will have to be for foreign trade. The Japanese are especially concerned to end what they call a "one-eyed" state of trade, in which very few Japanese traders, agencies or representatives are allowed abroad, while the community of foreign traders resident in Japan is practically as large as ever it was. The Allies' concern will be to ensure as far as possible that the Japanese have an honest conception of competition, in foreign markets; they have still a tendency to compete "in price alone," by price-slashing rather than by increasing quality, service, etc.

The general pressure for an integral and "developmental" scheme for Southern and Eastern Asia as a whole is greatly increased. Japan's inclusion in it (directly or indirectly) is now a virtual necessity. Japan must look more than ever to those regions, with the practical closure of her main natural contacts and exchanges, those with North-East Asia. Premier Yoshida stated at the beginning of 1949 that Japan "will and must" trade with China, and went on to make clear that his assumption was that this trade was as necessary and valuable to China as to Japan, and that therefore China would never act to prevent this development. In this, he failed to appreciate the character of the Peking Government, which apparently stands ready to break any number of ricebowls in Asia, if the will of the Kremlin requires it.

The prospects for Japan have improved, from a very short-run point of view. The rearmament-boom purchasing of S. and S. E. Asia staples in the world market has apparently raised the dollar-income of that area, and its effective demand for Japanese products. The Japanese expect that rearmament in the West will mean less Western export goods available for overseas markets, thus giving Japan a further opening. And Japan is now a forward supply base for the operations in Korea, thereby making considerable earnings at present.

But from a longer-term point of view, the dangers are of course great. Primary material shortages are already felt. The post-war cost

THE BRITISH ECONOMIC POSITION

Economic Outlook:—There is actual or potential shortage of many industrial raw materials. The main cause is the exceptional demand for raw materials for rearmament and stockpiling, particularly in the U.S.A. Shortage of materials may be the main factor limiting industrial output in the coming year.

Production Achievements in 1950:—(a) Taking industrial production as a whole 8½% more output was achieved in the first ten months of 1950 than in the same period a year earlier. The corresponding figures for 1949 showed an increase of between 6½% and 7% over 1948. (b) Road Vehicles and Engineering: These important industries have played the biggest single part in 1950's production gains. In the first ten months of 1950 the output of passenger motor cars was 431,639, an increase of 29% over 1949. Of this year's total output 80% has been for export. Commercial road vehicles have also shown a big gain—24%. By the end of October production had reached 216,637 units, of which 64% were for export. (c) The output of steel has continued to grow, and judging from the results up to the end of November will reach nearly 16½ million tons for the year 1950. This 5% more than the 1949 output. (d) The output of the whole group of textile industries was 12% up in the first ten months of the year. The production of rayon products has made big strides. (e) Coal output, with only two weeks' figures still to come in, looks certain to be little greater than in 1949, when output totalled 215 million tons. The consumption of coal in Britain has risen sharply this year as a result mainly of increasing industrial production, and decisions have been made to restrict exports and to import coal.

structure, in Japan as in other countries, is still very badly adjusted for such a prospect. The terms of trade are moving against Japan at present. Fears are expressed that a "war-footing," in the 1950's as in the 1930's, means an unnatural and distorted basis of the Japanese economy, from a long-term point of view. There are however two main bases of optimism: one is the remarkable adaptability and assiduity of the Japanese, the other the hope of international collaboration for the substantial economic development of South and South East Asia. Why should the two not be taken up together? A purposeful East Asia scheme, with suitable Japanese participation, might change the situation in the Eastern hemisphere, in the same way as the Marshall approach did change the situation in the West.

Overseas Trade:—(a) The value and volume of British exports continued to expand in 1950. By the end of November exports (value f.o.b.) had reached £2,060 million compared with £1,683 million in the corresponding period of 1949. In recent months the volume of exports as a whole has been some 20% higher than a year earlier. (b) Speaking to the Institute of Export on 20th December, Mr. Gaitskell, the Chancellor of the Exchequer, said "..... We have in these last few months been actually earning a surplus of visible exports over visible imports when you value them both on the same basis..... As far as I have been able to discover, this true surplus on visible trade is something which has not been a feature of our trade for something like a hundred years..... We have also been earning, as usual, a surplus on our "invisible" items." (c) The value in U.S. dollars of shipments to the U.S.A. and Canada in November 1950 reached \$79 million—roughly double the average monthly figure in 1949. (d) From the time of devaluation (September 1949) to November 1950 average import prices rose 34% while export prices have been raised only 11%.

Suspension of Marshall Aid:—(a) An agreement was announced on 13th December between the U.S. and United Kingdom Governments that Marshall Aid to Britain will be suspended from the end of 1950. Britain remains a full participant in the Organisation for European Economic Cooperation in Paris and the European Payments Union. The programme is suspended; not terminated. Furthermore, programmes for fostering development in dependent territories overseas and for the interchange of technical knowledge to encourage higher productivity, will be maintained. (b) The two considerations which led to this decision were: (i) The Sterling Area as a whole has, temporarily at least, moved from the heavy dollar deficits of earlier post-war years to a position of dollar surplus in 1950, and (ii) The defence programme of the U.S.A.—which includes the Mutual Aid Programme—will now impose heavier burdens on the U.S. economy. (c) The total amount of dollars allocated to the United Kingdom in the 2½ years the programme has been in operation was \$2,694 million. The supplies represented by this sum—12% of imports into Britain during the period—have not only helped Britain to meet her dollar deficit and to expand her output rapidly; they have helped in the recovery of multilateral world trade. Marshall Aid has also indirectly helped some of the other Sterling Area countries in two ways: (i) It has supplemented the total supply of dollars available to the Sterling Area as a whole, and (ii) It has enabled Britain out of her increased output, to supply more manufactured goods to the other Sterling Area countries.

THE CURRENCY, BANKING, AND EXCHANGE SYSTEM OF THAILAND

By B. R. SHENOY

The economy of Thailand at the close of world war II required profound readjustments to the new world conditions. The entire country had been under Japanese occupation during the war, and the prewar currency system had been seriously disrupted. The wartime history of the Thailand monetary and exchange system, and the consequent adjustments in the post-war period, after the connection with Japan had been severed, with a brief reference to the more recent exchange adjustments, will be outlined in this paper.

CURRENCY, CREDIT, AND PRICES

The currency standard

Thailand's Currency Law of 1928 had placed the baht on a gold (sterling) exchange standard, the par of exchange being 0.66567 grams of fine gold per baht, or 11 baht to £1. With the departure of sterling from gold in September 1931, the link with sterling was abandoned in favor of gold. In May 1932 the sterling link was re-established at the old parity, and the option of converting the baht into either gold or gold exchange was deleted from the currency laws.

Before the war, the issue of currency and the volume of money in circulation responded to changes in the balance of payments. When the payments position showed a surplus, the currency reserves and the monetary circulation increased; when it showed a deficit, both declined. Expansion and contraction were more or less automatic. The steady prewar increase in the volume of money in circulation reflected an increase in the demand for money resulting from the expansion of production and trade, and the capacity of the monetary system to provide additional money as the consequence of an export surplus and the accumulation of reserves. There was no deficit financing by the government. Before January 1942 the currency law did not permit baht government loans or treasury bonds to be held as part of the currency reserves.

When World War II spread to Southeast Asia, the convertibility of the baht into sterling was again suspended (January 1942), its gold value was fixed at 0.32639 grams of fine gold, and the currency authority was authorized to issue notes against gold delivered either abroad or in Bangkok. Simultaneously, government securities and treasury bonds (a treasury bond being defined as "a non-interest-bearing bond issued by the Minister of Finance to the Issue Department of

the Bank of Siam on the general credit of Siam") were added to the list of permissible currency assets. The gold value of the baht was further reduced to 0.25974 grams of fine gold in April 1942.

In June 1942 the baht was, in effect, placed on a yen exchange standard, the par of exchange being one baht to one yen. This meant a devaluation by approximately 36 percent relative to the previous rate of exchange, which had been 100 baht to 155.70 yen. The convertibility of yen into baht was made conditional upon satisfactory evidence that the currency was needed for bona fide business purposes. The sums required to meet the needs of the Japanese occupation forces were determined for each half-yearly period by agreement between the Governments of Thailand and Japan. The Bank of Thailand Act of December 10, 1942 established the Bank of Thailand, with the customary central bank functions. At that time, the management of the note issue was transferred from the Ministry of Finance to the Issue Department of the Bank.

Thailand's connection with Japan was severed on September 7, 1945, and the state of war with the Allies was formally terminated on January 1, 1946. On May 1, 1946, the link with the yen was abandoned, and the parity of the baht was fixed at 0.09029 grams of fine gold, or 40 baht to £1 and 9.925 baht to US\$1.00 (or 100 baht to US\$10.075). The currency authority

was required to "receive or deliver pounds sterling or U.S. dollars in exchange for notes." Simultaneously, treasury bills were added to the permissible components of the currency reserve. On September 26, 1949, following the devaluation of sterling, the par of exchange was altered to 35 baht per £1 and 12.50 baht per US\$1.00.

Inflation and prices

During the war a large expansion of the money supply was necessary to cover budget deficits, to meet the baht currency needs of the Japanese occupation forces, and to pay for the export surplus with Japan. The budget deficits were met by turning over treasury bonds (amounting to 300.5 million baht between 1942 and 1945) to the Bank of Thailand, and the baht currency requirements of Japan were met by the issue of baht notes mainly against yen credits in Tokyo.

The issue of notes against yen credits accounts for by far the largest part (about 79 percent) of the increased note circulation. In December 1942 the amount of yen credits in the currency reserves was 61 million yen (Table 1). The amount had increased to 571 million yen in December 1944, and the rapid increase during the last nine months of the Japanese occupation raised the figure to 1,346.80 million yen in September 1945. The note circulation rose from 392.72 million baht on December 31, 1942 to 2,096.13 million baht on September 30, 1945.

TABLE 1. NOTES IN CIRCULATION AND JAPANESE EXPENDITURE IN THAILAND
(Cols. 2-4, in millions of yen; cols. 5-8, in millions of baht)

End of Month (1)	Yen Credits in Currency Reserves Issue Dept. (2)	Banking Dept. (3)	Total (4)	Japanese Military Expenditures in Thailand (5)	Sale of Gold by Japan to Bank of Thailand (6)	Trade Surplus with Japan * (7)	Notes in Circulation † (8)
Dec. 1942	61.00	—	61.00	24.00	15.00	52.00	392.72
Dec. 1943	159.00	78.05	237.05	192.71	29.00	12.34	657.62
Dec. 1944	571.10	186.89	757.99	514.00	60.00	66.84	1,174.62
Sept. 1945	1,346.80	211.00†	1,557.80	799.40	25.00	25.51	2,209.63

* Difference between military expenditures (column 5) and the sum of the annual increase in yen credits (column 4) and the sale of gold to the Bank of Thailand (column 6).

† Includes notes held in the Banking Department of the Bank of Thailand.

‡ The difference between the figures in column 2 and 4.

Source: Bank of Thailand Annual Reports.

If the yen credits held in the Banking Department of the Bank of Thailand are also taken into account, it would appear that out of a total of 1,686.80 million baht for Japanese expenditures up to the end of September 1945, 1,557.80 million had been met by yen credits to the Bank of Thailand and 129.00 million by the sale of gold to the Bank (earmarked in Japan). Of this expenditure, 1,530.11 million baht was for the requirements of the occupation forces and 156.69 million was payment for the export surplus to Japan.

After the conclusion of the war, the money supply continued to expand, but

at a much less rapid rate (see Table 2). For the most part, this postwar expansion reflected the recovery, at high price and wage levels, of production and trade. In 1945 and 1946 the rapid increase in bank deposits was due largely to the increased number of commercial banks, and the increased use of checks for payments exceeding 1,000 baht. The supply of money rose substantially in 1946, then declined slightly in 1947, but rose again in 1948 and in the first half of 1949, when rice harvests were good and there was a rapid general expansion of production. By the end of August 1949, it amounted to 3,290.64 million baht.

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Since September 1945, there has been no further issue of notes against treasury bonds. Budget deficits have been met by the issue of loans or treasury bills. The latter were not held by the Issue Department of the Bank of Thailand but part of the loans were held by the Banking Department, and to that extent there was deficit financing through the creation of central bank money. Budget deficits in 1945, 1946, and 1947 totaled in all 466.86 million baht. Between December 1944 and December 1947 the public debt outstanding increased by 533.45 million baht; 287.46 million baht of the debt as of December 1947 was held by the Bank of Thailand and 245.99 million by the commercial banks.

The postwar expansion of the volume of money was also checked by withdrawing from circulation profits from the sale of sterling and rupees (held in the "Stabilization Account," whose operations are described below) on the free market, which amounted to 181.06 million baht as of December 31, 1948. Other minor steps taken to limit the note issue included the use of gold reserves held in the United States to purchase urgently needed imports and sales of small quantities of gold to the public. The anti-inflationary effect of the withdrawal in February-March 1945 of notes of 1,000 baht denomination was shortlived, as the savings bonds issued in exchange for them were redeemed by February 1947.

TABLE 2. MONEY SUPPLY OF THAILAND
(million baht)

End of Month	Notes in Circulation *	Demand Deposits of Commercial Banks	Total
Dec. 1939 ..	176.57	50.74	227.31
Dec. 1945 ..	1,838.68	306.63	2,145.31
Dec. 1946 ..	2,119.24	722.95	2,842.19
Dec. 1947 ..	2,106.87	661.37	2,768.24
Dec. 1948 ..	2,389.99	693.04	3,083.03
June 1949 ..	2,499.15	780.88	3,279.53
Aug. 1949 ..	2,497.76	792.88	3,290.64

* Excluding notes in the Banking Department of the Bank of Thailand.
Source: Bank of Thailand.

As inflation increased, prices and the cost of living rose, though not at exactly the same rate as the expansion of the money supply. In August 1949 the money supply was some fourteen times the volume in December 1939 (Table 2). The wholesale price index was about thirteen times, and the Bangkok cost of living index about eleven times, the prewar levels (Table 3).

TABLE 3. NOTES IN CIRCULATION, PRICES, AND COST OF LIVING IN THAILAND

	Wholesale Price Index (1939-40 = 100)	Cost of Living Index (1939-40 = 100)	Notes in Circulation * Total (million baht)	Index (1939-40 = 100)
1939-40 †	100	100	176.57	100
1940 ...	147	110	234.78	133
1941 ...	194	127	297.34	168
1942 ...	215	172	390.52	221
1943 ...	271	257	648.12	367
1944 ...	354	456	1,161.03	658
1945 ...	—†	876	1,838.68	1,041
1946 ...	—†	1,040	2,119.24	1,200
1947 ...	1,465	1,214	2,106.87	1,193
1948 ...	1,421	1,211	2,389.99	1,354
1949 June	1,358	1,173	2,499.08	1,415
1949 Aug.	1,319	1,109	2,497.76	1,415
1949 Sept.	1,323	1,129	2,489.89	1,410

* As of end of year or month.

† Financial year ended March 31.

‡ In 1945 and 1946 publication of the index number was suspended.

Source: Bank of Thailand.

The increase in the money supply in 1948 and 1949 (when the progress of recovery was considerable) was not attended by any rise in prices or cost of living. The wholesale price index declined from 1,465 in 1947 to 1,421 in 1948 and to 1,323 in September 1949. The Bangkok cost of living index was steady in 1948 and declined to 1,129 in September 1949, from an average of 1,211 in 1948.

The statistics of currency, credit, and prices thus indicate that early in the postwar period Thailand had succeeded in calling a halt to inflation. Since the close of the war, treasury disbursements have to only a small extent exceeded proceeds from revenue. Though more than half of the internal public debt is held by the Bank of Thailand, the volume of debt outstanding is moderate. This, coupled with the increase in production, arrested the upward trend of prices which, since the middle of 1947, have been declining slightly.

Commercial banks and other financial institutions

In 1938 there were eleven commercial banks in Thailand (four incorporated in the country and seven abroad) with three branches. Since the war, with the increase in monetary circulation, new banks have been opened, and in August 1949 the number was 23 (10 Thai and 13 foreign) with 29 branches, which, with one exception, were of Thai banks.

As the bulk of bank funds are demand deposits, their investments are short term. Most of the banks are

engaged in financing the movement of crops, principally rice, from the interior to Bangkok and their export abroad. They do not lend on long term either to industry or to agriculture.

In 1938 about 33 percent of the total assets of commercial banks was invested in loans and advances, about 14 percent in discounts and investments, and somewhat under 27 percent in foreign exchange. The rest of the liquid assets was held in the form of cash which represented 36.87 percent of demand deposits (Table 4). In August 1949, loans and advances represented 31 percent of the total assets, discounts and investments 9 percent, and investments in foreign exchange 17 percent. The cash balances were larger than before the war, being equivalent to 43.30 percent of demand deposits.

The interest paid on commercial banks deposits is limited to prescribed percentages below the Bank of Thailand's rediscount rate which, since February 1945, has remained unchanged at 8 percent. The upper limit of interest payable on demand deposits is 2½ percent below the central bank rate, and on time deposits 2 or 1½ percent below the bank rate, depending upon the duration of the deposits.

Commercial banks are required to maintain minimum cash reserves of 10 percent of total deposits. The Bank of Thailand may at its discretion alter this percentage within a range of 9 percent and 20 percent. Of these reserves, a minimum of 5 percent of demand deposits and 2 percent of time deposits must be held with the Bank of Thailand. The latter percentage may be raised to 3 at the discretion of the Bank.

In view of their large cash reserves and the uninterrupted progress of postwar economic recovery, the banks have seldom been obliged to borrow from the Bank of Thailand. When in need of funds they sell their portfolio of treasury bills to the Bank, which is always willing to buy them. Unsecured loans represented about 11.6 percent of total loans and advances in December 1948, and about 6 percent in August 1949. The interest on loans and advances charged by the local banks and two of the foreign banks varied between 5 and 12 percent in 1947, and between 5 and 15 percent in 1948. The rates charged by the other foreign banks varied between 5 and 8 percent in 1947 and between 4 and 8 percent in 1948.

TABLE 4. SUMMARY STATEMENT OF COMMERCIAL BANKS OF THAILAND
(Cols. 1-8, in millions of baht)

Year	Paid up Capital & Reserves (1)	Demand Deposits (2)	Deposits Time (3)	Total (4)	Cash on Hand * (5)	Loans and Advances (6)	Discounts and Investments (7)	Foreign Exchange (8)	Per Cent of Demand Deposits		
									Cash on Hand (9)	Loans and Advances (10)	Discounts and Investments (11)
1938	4.55	43.61	16.33	59.94	16.08	25.64	11.05	20.64	36.87	58.79	25.34
1939	4.55	50.74	16.60	67.34	15.84	25.64	11.05	20.78	31.42	50.58	21.78
1946	20.69	722.95	41.57	764.52	481.05	139.95	174.46	40.91	66.54	19.36	24.13
1947	27.59	661.37	52.27	713.64	324.56	281.96	176.20	84.86	49.07	42.63	26.64
1948	45.70	699.04	83.55	776.59	345.42	399.18	800.16	248.02	49.84	57.60	24.36
1949 (Aug.) ..	79.64	792.88	93.73	886.61	343.29	484.03	133.49	264.96	43.30	61.05	16.84

* Including balances with other banks.

Source: Bank of Thailand.

The financial institutions of Thailand also include the Savings Bank, the Bank for Cooperative Affairs, cooperative societies, and insurance companies.

The Savings Bank is owned by the Government and governed by the Savings Bank Act, 1948. It was established to take over the business of the Treasury Savings Bank of the Post and Telegraph Department; at present it has 122 branches and agencies. Its main object is to attract the small savings of the rural population, through deposits and the sale of savings and prize bonds, the latter being the more popular. The Bank's investment policy is controlled by the Minister of Finance, and 90 percent of its resources is invested in government securities, the Bank being the second largest holder of the public debt (17.18 percent of total). The rest of its funds are utilized for medium and long term advances to the Bank for Cooperative Affairs and to government industrial undertakings. As of November 15, 1949, 128.70 million baht was invested in government securities and 78.50 million baht in loans; of these loans, 53.75 million was to the Bank for Cooperative Affairs, 21.20 million to other government institutions, and 3.55 million to private individuals.

The Bank for Cooperative Affairs, whose activities are regulated by Royal Decree, works under the close supervision of the Cooperative Department, Ministry of Agriculture. The Bank has been in existence since 1947 and is the government's agent for financing cooperative societies and therefore, indirectly, agriculture. As of December 31, 1948 its resources were 65.35 million baht, of which 10 million represented capital, 22.17 million the proceeds of government cooperative bonds, and 29.50 million loans from the Savings Bank. Outstanding loans granted by it to cooperative societies (principally credit corporations) amounted to 38.46 million baht in 1947, 64.24 million in 1948, and 99.27 million in 1949 (November).

Though the cooperative movement has been growing, its significance in agricultural finance is still small. The number of credit societies rose from 2,851 in 1941 to 6,196 in 1948. During the same interval, their membership increased from 43,723 to 109,247. Their assets in 1947 totaled 41.79 million baht, of which loans to members (short and long term) amounted to 37.73 million. During the year the societies had obtained loans of 38.30 million baht from the Bank for Cooperative Affairs. In 1948, loans to members amounted to 55.03 million baht.

In July 1949 there were 89 insurance companies in Thailand (36 incorporated in Thailand and 53 abroad). They all were privately owned. The foreign companies invested all their funds abroad, and the local companies invested practically all their funds in Thailand. The bulk of the loans and

advances (about 75 percent in 1947) is on personal security. In 1947, the total resources of the local insurance companies amounted to 45 million baht, and their loans in Thailand to 18.33 million.

The financial institutions of Thailand are primarily a source of credit to finance trade, both domestic and foreign. They are not presently an important factor for channeling savings into productive investment. If Government is to undertake a large-scale development program, it will have to consider the establishment of appropriate institutions designed to make available the necessary funds without having an unduly inflationary impact on the economy.

EXCHANGE CONTROL AND THE RATE STRUCTURE

Exchange controls

The currency reserve position of Thailand at the end of 1945 was very weak. The yen exchange, which in December 1945 amounted to 1,557.80 million yen, had become worthless and was subsequently written off. The sterling assets, £14.50 million, had been blocked, as well as the gold held in Japan (39.66 million grams fine valued at US\$44.63 million) and in the United States (8.00 million grams fine valued at US\$9.00 million). Gold held in Bangkok (29.19 million grams fine valued at US\$32.85 million), which was the only available part of the reserve, represented 7.61 per cent of the notes in circulation (1,838.68 million baht), and the subsequent release of the gold held in the United States and of a small part of the blocked sterling assets did not alter the position significantly.

Current import needs had, therefore, to be met from current export proceeds, the use of which had to be rationed in accordance with a schedule of priorities. An attempt was made to do this by exchange control and the control of imports and exports. Exchange control was imposed by regulations issued under the Exchange Control Act, 1942, as amended by the Emergency Decree of 1943. The allocation of foreign exchange was entrusted to the Foreign Trade Regulation Board, which was dissolved in the early months of 1947 and subsequently (June 20, 1947) replaced by the Foreign Exchange Control Board; during that interval, the allocation of exchange was made by the Governor of the Bank of Thailand. On the resignation of the Board on November 8, 1947, allocation of exchange again was vested in the Governor. The administration of the exchange control was entrusted to the Bank of Thailand, which worked in close cooperation with the Ministry of Commerce, other government departments, and the Trade Regulation Board (later the Exchange Control Board).

Neither exchange control nor control of imports and exports was a success. There was extensive smuggling of exports and extensive black market operations in foreign exchange, with black market rates stated by the Bank of Thailand to have been about twice the official rate for sterling and about 2½ times for dollars. From July 1, 1946 to December 31, 1946 the foreign exchange receipts (excluding proceeds from the sale of gold held in the United States) which passed through the foreign exchange control amounted to only 92.09 million baht, and foreign exchange disbursements to 87.95 million.

The reasons for this failure have been summarized by the Bank of Thailand as follows:

(1) The internal price of rice in neighboring countries was much higher than the export price fixed by the Tripartite Agreement with the United Kingdom and the United States. This was also one of the important factors which led to smuggling of rice out of the country on a large scale.

(2) Incompetency and desire for personal gains led to ineffective control of imports and exports. This was another factor which encouraged large scale smuggling of goods out of the country, in particular, of rice which was estimated to reach half the total tonnage legally exported.

(3) As exporters had to surrender the foreign exchange proceeds of their exports at the official rate, their baht income was low in comparison with the general internal price level. There was, therefore, neither incentive to export nor inducement for rice merchants to deliver rice for exportation to the United Nations.

(4) Under the foreign trade and exchange control regulations, any person was allowed to import any kind of goods whatsoever provided he did not apply for foreign exchange from official sources, and furthermore, persons with foreign exchange holdings abroad were not required to surrender their holdings to the central pool. The intention of this proviso was to encourage the importation of the much needed goods. However, it unwittingly opened the door to black market dealings and enabled smugglers to dispose of their foreign exchange proceeds. For black market sterling rate was twice and the dollar rate two and a half times as high as the official rate.

(5) The greater part of foreign exchange in the central pool and what was acquired by the sale of gold from the Currency Reserve (already mentioned in the Bank's Report for 1946) was utilized or earmarked for Government expenditures and for purchase of goods ordered by the Government for rehabilitation of the country. The balance left over was therefore insufficient, to meet general trade requirements.

Relaxation of controls

In these circumstances, the administration concluded that the continuance of controls might delay economic recovery. By several measures adopted during 1947, trade and exchange controls were therefore relaxed, and there then emerged a system of official exchange rates, free market rates, and hybrid rates which ensued from the "mixing system".

Controls were retained on exchange proceeds from exports of rice, rubber, tin, and teak, which were in short supply and the world demand for which was strong. To this list cement was added toward the close of the year. The export of rice was a government monopoly and the entire exchange receipts from it accrued to the exchange control authorities. The full amount of the exchange receipts from the export of cement had also to be surrendered at the official rate. From the proceeds of other controlled exports, a percentage had to be turned over at the official rate. As of April 1, 1947, the surrender of a percentage of teak export receipts was no longer required.

The official rate of exchange was applied to sales of exchange by the Bank of Thailand only for the requirements of the government and of government-controlled enterprises, the importation of petroleum products, the expenses of students, and a few other items specified in the priority lists. For permissible imports which fell outside these lists, foreign exchange had to be obtained in the free market.

As of October 9, 1947, the commercial banks, authorized to deal in foreign exchange, were permitted to buy, sell, and transfer foreign exchange without restriction. Except when acting as agents for the surrender of exchange to, or for the purchase of exchange from, the exchange control authorities, they were not bound by the official rates or by the Bank of Thailand's free rate for permissible imports. This was tantamount to giving official recognition to free market exchange transactions.

In 1947, as the combined result of increased production, better harvests, and measures taken to prevent the smuggling of rice, the volume of foreign exchange which passed through the Controls was larger than in 1946. Probably the "mixing system," which permitted exporters to retain part of their exchange receipts, weakened the incentive to smuggle rubber and tin. In 1947, payments at the official rate exceeded receipts of foreign exchange by the Controls by 107.03 million baht. Foreign exchange receipts from July 1, 1946 to December 31, 1947 amounted to 558.91 million baht, and foreign exchange disbursements during the same period were 661.90 million. The sale proceeds (89.11 million baht) of the gold held in the United States covered the larger part of this deficit; the balance was met from the remaining reserves.

In 1948, controls were further relaxed. The Foreign Exchange Board was dissolved, and import controls practically ceased to exist. By Ministerial Regulation (No. 7) dated March 14, 1948, the restriction which limited foreign exchange dealings to authorized banks was removed. This, in effect, legalized the free market transactions of the bazaar. As of June 11, 1949, exporters of cement were released from the obligation to surrender their exchange receipts to the Controls.

The remaining controls are not important, except for rice, rubber, and tin exports. The export of rice is a state monopoly, administered by the Ministry of Commerce, and private export is prohibited. The export of tin, which until November 1949 was subject to international allocation, is governed by licenses issued by the Department of Mines. Apart from certain customs formalities, designed to ensure that the specified percentages of exchange receipts from rubber and tin exports are surrendered to the Bank of Thailand, and restrictions on the export of goods in short supply, virtually no other export controls exist.

Import licenses, which are issued by the Ministry of Commerce, are necessary only in respect to certain luxury goods listed in the Import Control Ordinance No. 2 of 1948. Foreign exchange to finance these imports has, however, to be acquired on the free market. The importation of gold is, in effect, banned, as all gold imported must be surrendered to the Bank of Thailand at its official price. Other import controls relate to security measures, are instruments of excise policy, or are designed to protect certain government monopolies.

The entire foreign exchange receipts from the export of rice, 40 percent of the proceeds from tin, and 20 percent from rubber have to be surrendered to the Bank of Thailand at the official exchange rate. The change proceeds from other exports are not subject to any exchange control.

The supply of foreign exchange at the official rate is still restricted to government imports, imports of fuel and lubricating oils by scheduled companies (subject to maxima each year), certain educational and public health requirements, and such other purposes as the Governor of the Bank of Thailand might deem to be of national advantage. The Governor has not exercised this authority to expand the payments effected at the official rate.

No permit is required for the export of foreign currencies from Thailand, though certain customs formalities are required. With effect from January 27, 1949, the import of foreign currencies in amounts exceeding the equivalent of 1,000 baht is prohibited except under permit. Baht currency may be exported without a permit, but its importation is prohibited, though travelers are permitted to bring with them up to a maximum of 200 baht per person.

The rate structure

From these controls and policies there emerge on the export side at least four, and on the import side at least three, exchange rates. The export rates are (1) the official rate for rice, (2) mixed rates for rubber, (3) mixed rates for tin, and (4) a fluctuating free market rate or rates for other exports. The import rates are (1) the official rate for the Government and for favored private imports and remittances, (2) the Bank of Thailand's free rate for imports which the Bank may approve, and (3) a fluctuating free market rate or rates for imports to which the Bank of Thailand free rate is not applicable.

The official buying and selling rates of the Bank of Thailand and of the authorized banks, as revised on September 27, 1949 subsequent to the devaluation of sterling, for U.S. dollars and sterling, are as follows:

	Buying	Selling
	(in baht)	
Sterling		
Bank of Thailand	34.85%	35.14%
Authorized banks	34.56%	35.43%
Dollar		
Bank of Thailand	12.44%	12.55%
Authorized banks	12.34%	12.65%

The effective rate for rice is the authorized banks' official buying rate. On the basis of free market rates of 24.00 baht per US\$1 and 59.00 baht per £1, the effective rate for rubber (20 percent at the official rate and 80 percent at the market rate) is 21.67 baht US\$1 and 54.11 baht per £1; and for tin (40 percent at the official rate and 60 percent at the market rate) 19.34 baht per US\$1 and 49.22 baht per £1.

The Bank of Thailand's free rate for sterling, which was 59.50 baht in the last week of March 1948, was revised downward on three occasions before the close of the year by 0.25 baht each time, and remained at 58.75 baht between December 27, 1948 and October 8, 1949, when it dropped to 57.75 baht. The rate was further revised to 57.00 baht on October 22, 1949 and has not been changed since. The commercial bank's average selling rate for sterling, which was 79.39 baht per £1 in February 1947, had risen by June to 83.84 baht. Thereafter it progressively declined. During 1948 and 1949 it fluctuated between 61.56 and 56.59 baht. The rate on January 28, 1950 was 58.78 baht.

To this rate structure must be added on export rate and an import rate for trade with Japan. This trade operates on an open account basis in U.S. dollars; the original agreement, concluded on December 4, 1948, provided for a monthly announcement of the baht-dollar rate to be used, so that changes in the rates for trade with Japan could be made, if necessary, when the market rate varied significantly or to adjust the balance of trade with Japan. This dollar rate remained unchanged at 20 baht during 1949. Allowance being made for the com-

mercial banks' commission, the effective rate for exports was 19.80 baht to US\$1, and for imports, 20.20 baht.

The change in the official rates of the baht subsequent to the devaluation of sterling in September 1949 was not of great practical significance to the economy of Thailand. Its major incidence was on the distribution of profits from rice exports as between the Government and the Bank of Thailand.

Practically the entire export of rice is paid for in sterling, which is surrendered to the Bank of Thailand at the official rate. The revaluation of the baht therefore reduced the Government's profit by 5 baht per £1. Correspondingly, the Bank of Thailand's profits on the sale of sterling in the free market have increased. The market rate of exchange is unaffected by the official valuation of the baht, so that the difference between the official and the market rates is now larger. There has therefore been a redistribution of profits from the export of rice from the Government to the Bank of Thailand. The amount of sterling obtained in exchange for the rice exported remains unchanged.

The revaluation of the gold and foreign exchange assets of the Bank of Thailand resulted in a net gain in baht, as the gold and dollar assets in the Issue and Banking Departments of the Bank exceeded the sterling and rupee assets. This meant a reduction in the fiduciary issue of baht notes and a corresponding increase in the covered issue.

The official rates are of interest only to exporters of rice, rubber, and tin, since the proceeds from other exports are disposed of in the free market. Growers of rice have not been affected, as the baht price paid by the rice monopoly was not changed after the revaluation. Export statistics show that in 1948 and part of 1949, for which data are available, most of the exports of rubber and tin went to the dollar area. The new dollar rate meant, therefore, a slight advantage to the exporters of these commodities, and the advantage was greater for tin than for rubber exporters.

As import duties are payable on import valuations at the official rates, the new exchange rates involved an increase in the import duty on dollar goods and a reduction in the import duty on sterling goods. Export duties remained unaffected.

THE FOREIGN EXCHANGE FREE MARKET

Free market for sterling

Since the end of the war there has been in Bangkok a relatively uncontrolled free market in foreign exchange, the principal currencies dealt with being sterling, currencies linked to sterling (chiefly Hongkong dollars, Straits dollars, and Indian rupees), and U.S. dollars. The market was at first confined to the commercial banks and the bazaar. As of March 25, 1948, when

foreign exchange accruing to the Control increased owing to a combination of favorable circumstances and the more effective prevention of the smuggling of rice, the Bank of Thailand entered the sterling part of the free market, "in order to prevent," according to an official explanation, "violent fluctuations and depreciation of the baht-sterling rate and to reduce the money supply" and the cost of living.

Since March 1948 the sterling part of the free market has thus been composed of two sections: a market for sterling acquired from the Bank of Thailand at the latter's selling rate (which may be called the free market for official sterling), and a market for sterling acquired from other sources (which may be called the open market for sterling).

The supply of sterling placed on the free market by the Bank of Thailand was drawn (after the requirements at the official rate had been met) from the whole of the sterling receipts from the export of rice, 40 percent of the sterling receipts from the export of tin, 20 percent from the export of rubber, and, for some time, 50 percent from the export of teak.

In 1948, of the Bank of Thailand's total sterling receipts of £16.37 million, £5.09 million was sold at the official rate, £9.65 million at the Bank of Thailand's free rate, and the rest was held over for transfer to reserves. The sales at the official rate were made up of £2.60 million for imports and remittances on government account, and £2.48 million sold to private individuals and firms, mainly for petroleum products (£2.16 million).

During the first ten months of 1949, official receipts of sterling from the export of rice, tin, and rubber amounted to £32.31 million. Of this sum, £4.11 million was disposed of at the official rate, £15.49 million at the free rate, and £12.71 million was held over for addition to the official holdings of foreign exchange. Government requirements absorbed £1.93 million of the amounts sold at the official rate, and £2.17 million was used for imports of petroleum products.

The supply of sterling to the open market is drawn from 80 percent of the sterling exports of rubber, 60 percent of the sterling exports of tin, the whole of the sterling receipts from other exports excluding rice, and the sterling receipts from invisibles and smuggled exports. To this must be added sterling which may flow into Bangkok from neighboring countries, depending upon the rates ruling in the free market.

It is difficult to assess the size and relative importance of the free market for official sterling and the open market for sterling, since the volume of transactions in part of the latter is indeterminate. The Bank of Thailand has estimated that sterling supplied by the Bank of Thailand might represent somewhat over half of the total sterling sales (or purchases) in Thailand.

The demand for official sterling at the free rate is determined by the requirements for permissible imports (as approved by the Bank of Thailand) to which the official free rate is not applicable. (In practice, the commercial banks, in the first instance, sell to importers sterling at the commercial banks' market rate. When the applications are approved by the Bank of Thailand, the applicants are allowed a rebate amounting to the difference between the rate originally charged and the Bank of Thailand's free market rate at the time the application is approved. To the Bank of Thailand's selling rate, the commercial banks are permitted to add a commission of 1 per cent (inclusive of an exchange tax of 2,000 baht for every 1 million baht or part thereof) before passing on the exchange to the importers.

The imports for which official exchange is not granted include, for example, soap, paper and umbrellas. Though the Ministry of Commerce may issue licenses for their importation, the Bank of Thailand may not permit the use of official sterling to finance these imports).

The demand for sterling in the open market depends on the requirements for other imports, smuggled imports, capital transfers, and remittances for which official sterling may not be used.

Among the currencies linked to sterling, the Bank of Thailand has been selling in the free market, since August 19, 1948, Indian rupees, whose holdings by the Bank had risen from Rs 10 million in December 1946 to Rs 16.46 million in December 1947 and Rs 90.46 million in December 1948. With a view to protecting the market for its rupee sales, the use of official sterling to pay for imports from India was banned as of July 20, 1949. Such imports henceforth had to be financed exclusively in rupees. The Bank's selling price for rupees was based on its free market rate for sterling and was, consequently, somewhat below the open market rate. The rate prevailing in June 1950 was 4.31 baht per rupee. In 1948 the Bank's sales of rupees at the free rate amounted to Rs 534,500 and during the first ten months of 1949 to Rs 8.86 million. Payments for rice exports to India in 1949 were received in sterling.

Sterling purchased from the Bank of Thailand at the free rate may be used to pay for imports from the sterling area (except, from July 20, 1949, India), and the banks have utilized this sterling to make good the deficit in their supplies of sterling area currencies. It may also be transferred, in payment for imports, to countries to which the facilities of the "Transferable Account" system have been extended.

The profits from the sale of sterling and rupees in the free market are credited to a Stabilization Account held by the Bank of Thailand. As of December 31, 1948, this account amounted to 181.06 million baht. The amount has increased substantially since that date, though the exact figure is not known. In the first ten months of 1949, sales aggregated £15.50 million in sterling and Rs 8.86 million in Indian currency. The profits from these sales should have brought the

Stabilization Account to about 480 million baht as October 31, 1949. In the Bank's weekly statements of account appears under other deposits (i.e., other than government and bankers' deposits). It is regarded as the property of the Bank of Thailand and has not so far been drawn upon for any purpose.

With the progress in the recovery of production, increase in exports, control of the monetary circulation, and improvement in the domestic price situation, the open market rate for sterling fluctuated downward. From the last week of March 1948 to the close of October 1949, it varied between 62.71 baht to £1 and 57.53 baht to £1. As the open market rate declined, the Bank of Thailand's free rate was also revised downward.

The open market selling rate for sterling has exceeded the selling rate for official sterling by more than the commission (1 percent) which the commercial banks may charge their customers on sterling acquired by them from the Bank of Thailand. The two markets are separate from one another, though the rates have in general tended to move in the same direction. Between March and the end of November 1948, the average open market rate was above the Bank of Thailand's free rate by a margin usually varying between 1.14 percent and 1.86 percent, but rising to 2.05 percent during August 1948, and to 2.32 percent in November. From January 1949 through the middle of September, it ranged between 1.97 percent and 6.74 percent. For this rather wide margin of difference, the Bank's explanation is that it was "due to the fact that sterling purchases from the Bank could only be used for payments of certain permissible imports. Other transactions, many of a speculative nature, are financed entirely by exchange obtained from the market and at rates much higher than the Bank's selling rates."

After the devaluation of sterling, the open market rate, which was at 61.52 baht on September 17, 1949, declined by stages to 58.74 baht on September 30. It remained comparatively steady between 58.30 baht and 58.94 baht until the middle of October, but began to decline in the latter part of October, falling below 58 baht in the third week. Early in December 1949 it was less than the Bank of Thailand's selling rate (57.00 baht), falling to 56.39 baht on December 12. The rate then recovered to 57.46 baht on December 30, 1949 and rose to 59.59 baht on January 21, 1950. It then fell a little, to 58.78 baht on January 28, 1950; it was 57.14 on June 30.

It is clear that the Bank of Thailand's free rate and the commercial bank's selling rate are interdependent. It is apparent, too, that if transactions in the two sections of the market were confined to Thailand's imports and exports, the Bank of Thailand could, within limits, through its control over

the larger part of sterling export proceeds, determine the free market rate. By keeping out of the market temporarily, it could force the rate up, and, by lowering its own rate sufficiently, bring the market rate down. Its ability to force the rate up is, however, conditioned by its willingness to resist the pressure, when such pressure may develop, to issue notes against sterling; and its ability to force the rate down is limited by the size of its sterling reserves.

The behavior, described above, of the open market rate after the Bank of Thailand decided to maintain its selling notwithstanding the weakness of sterling seems to support the view that the Bank of Thailand can peg the sterling rate. The market rate, which had fallen below the Bank's free rate, rose above it after it became apparent that the Bank would not alter its rate. The resulting accumulation of sterling in the Banking Department of the Bank was about £12 million. As the market rate recovered, the Bank was able to dispose of part of this accumulation. Sterling in the Banking Department of the Bank was £8.77 million as of January 14, 1950.

Apparently when the supply of sterling in the open market is not sufficient to cover all sterling payments, the Bank of Thailand withholds its sterling by quoting a rate higher than the open market, and the demand for sterling drives the open market rate above the Bank's offer.

Free market for dollars

Unlike sterling, there is only one free market for U.S. dollars. The Bank of Thailand does not place on the free market any part of its dollar receipts. Any dollar exchange which remains after meeting dollar payments at the official rate is either credited to currency reserves or held in the Banking Department of the Bank.

The Bank of Thailand derives its supply of dollars from the dollar exports of rice, 40 percent of the dollar exports of tin, and 20 percent of the dollar exports of rubber. In 1948 these receipts aggregated \$62.55 million, and in the first ten months of 1949 they were \$37.68 million. In 1948, \$22.40 million (about 36 percent) was disposed of at the official rate, and \$40.15 million was held for reserves. The sales cover \$8 million to the Government (including \$3.88 million for the purchase of gold for subscriptions to the IMF and IBRD), \$6.33 million to the oil companies to pay for imports of petroleum products, \$7.19 million for remittances, and \$0.88 million to others. In the first ten months of 1949, \$19.23 million (about 51 percent) was sold at the official rate (\$12.96 million to the Government and \$6.27 million for oil imports). Statistics of remittances at the official rate during 1949 are not available. The dollar assets of the Bank of Thailand increased by \$13.56 million in this period.

The supply of dollars in the free market comes from 80 percent of the dollar exports of tin, the whole of the proceeds of other dollar exports and of smuggled exports sold against dollars. To this may be added the dollar proceeds of commodity arbitrage transactions effected through Bangkok, to take advantage of the broken cross rate in the free market for sterling and U.S. dollars, and the net inflow, if any, of speculative dollars which may be attracted to Bangkok when the prevailing quotations in the free market are favorable in comparison with those of neighboring free markets, the most important of which is Hongkong. There is also a small quantity of dollar receipts from invisibles.

The demand for dollars in the free market comes from the requirements for dollar imports and dollar remittances for which the official rate is not applicable, for smuggled imports (including gold), and for capital transfers. The size of this demand cannot be determined.

The volume of transactions in the free market for dollars is not known. It is believed to be smaller than in the neighboring free market in Hongkong. The principal dealers are the commercial banks (both foreign and Thai) and private firms of exchange brokers.

As in the free market for sterling, the improvement in production, trade, and the domestic price situation also brought the free market baht price of dollars down. From March through December 1947, the selling rate declined, with minor fluctuations, from 27.25 baht to 18.18 baht, the larger part of the decline occurring after July. During 1948 and the first ten months of 1949, the margin of fluctuation was narrower. In 1948, the average monthly rate fluctuated between 21.56 baht and 18.40 baht; and in the first nine months of 1949, it fluctuated between 19.83 baht (January) and 22.06 baht (August), the general trend being upward. In September the average rate was 21.64 baht and in October 21.90 baht. The upper limit reached in November (on the 26th) was 22.64 baht. In the second and third weeks of December, when the open market rate for sterling had fallen below the Bank of Thailand's selling rate, the free market rate for dollars moved upward, reaching 23.62 baht on December 20. In the last week of January 1950, it rose to 24.48 baht.

Sterling-dollar cross rates

The official baht-sterling and baht-dollar rates of exchange have conformed to the official sterling-dollar exchange rate, the sterling-dollar cross rates in Thailand being \$4.03 to £1 before, and \$2.80 to £1 after, the devaluation of sterling in September 1949.

In the free market for sterling and dollars, however, the cross rate has varied. In January 1949 the weighted average cross rate was about \$3.06 and fluctuated downward thereafter, the lower limit for the year, which was

touched in December, being \$2.50. In the predevaluation week, it varied between \$2.89 and \$2.84. On September 20, the cross rate was \$2.75. It then declined steadily, and early in January 1950 it was \$2.43; thereafter it rose to \$2.64 on June 30.

The trend of the cross rate in Bangkok, in normal circumstances, closely follows the trend in Hongkong. Hongkong appears to be the leading free market in the Far East and the rates quoted there influence the rates quoted in Bangkok and other Far Eastern centers.

During the first quarter of 1949, the cross rates in Bangkok and Hongkong were close to one another, the Hongkong rate being usually a fraction above the Bangkok rate. About the last week of March, the Hongkong cross rate fell below the Bangkok cross rate, and during the second quarter the gap between the two widened with the progress of Communist successes in China. The Hongkong rate suffered two precipitous drops in the last week of April and in the third week of May, the latter being probably related to the fall of Hankow on May 18. It reached its lowest limit (US\$2.25) on May 28, the day after the fall of Shanghai. Political disturbances kept the two markets apart for a time. Those who had dollars in Bangkok appear to have preferred to keep them there, and there was an outflow of dollars from Hongkong, representing a flight of capital from China.

The cross rate in Hongkong then recovered almost as rapidly as it had fallen, though a wide gap between the two cross rates remained for some time, the Hongkong cross rate being below that of Bangkok. The two, however, generally moved in the same direction.

Both rates rose in the first half of September 1949, the peak points being reached on the eve of the devaluation of sterling, on September 17. Later both rates declined, falling below the levels recorded a week prior to devaluation. About the middle of October 1949, the two cross rates came close to one another. This relation has since been generally maintained, with each of the two rates alternately above the other.

The wide margin between the official cross rate and the cross rate in the Bangkok free market, prior to the devaluation of sterling, is believed to have led to commodity arbitrage transactions in diamonds from South Africa, rubber from Malaya and India, and pepper from India, these commodities being shipped to the United States via Bangkok, instead of directly, in order to avoid the surrender of dollar receipts at the official cross rate to the controls of the exporting countries. In the respective producing countries, the commodities concerned were entered as exports to Thailand, payment for them being received in sterling. The dollar proceeds of the exports were then disposed of in the free market in

Bangkok. The profits from these transactions resulted from the difference between the official sterling-dollar exchange rate and the free market cross rates in Bangkok less the difference between the higher cost of shipping the goods to the dollar area via Bangkok, and other incidental expenses, and the cost of shipping them directly.

TABLE 5: STERLING-DOLLAR CROSS RATE IN HONGKONG AND BANGKOK

Date	Hongkong	Bangkok
1949 Jan. 5-3	US\$3.19	US\$3.14
Feb. 6-12	3.11	3.11
Mar. 6-12	3.08	3.06
Apr. 3-9	3.05	3.13
May 22-28	2.25	2.76
June 5-11	2.63	2.84
July 3-9	2.56	2.73
Aug. 7-13	2.61	2.74
Sept. 11-17	2.88	2.96
Oct. 3	2.68	2.73
Oct. 15	2.64	2.66
Nov. 1	2.63	2.63
Nov. 15	2.60	2.62
Nov. 26	2.51	2.56
Dec. 24	2.46	2.44
1950 Jan. 10	2.42	2.43
Feb. 13	2.48	2.47
Mar. 13	2.50	2.50
Apr. 11	2.62	2.62

Source: Bank of Thailand.

After the 1949 devaluations, the margin between the official cross rate and the free market cross rate diminished, and as more stringent exchange and trade control measures were also applied by the sterling area countries concerned, the attractiveness of such transactions diminished. Three instances of pepper shipments from India to the dollar area via Bangkok were, however, recorded by early 1950.

Similarly, significant shifts in 1947 in the rubber exports of Thailand to Malaya at the expense of exports to the dollar area are indicated by the trade statistics of that year, according to the Bank of Thailand Report for 1948. The report suggests that the rubber, in fact, was meant for re-export from Singapore to the dollar area, the rubber being entered in the Thai customs as exports to the sterling area, but by the Singapore agents of the Thailand exporters as an entrepot export to the dollar area in order to avoid the Straits Control. The dollars received were, in due course, disposed of in the free market at Bangkok, part of the baht proceeds being utilized for the purchase of 20 percent worth of sterling for surrender to the Thai Controls. The profits from this transaction would be the difference between 20 percent worth of the dollar export proceeds of rubber converted at the official and the market cross rates less the difference between the higher cost, if any, of shipment via Singapore and the commission payable to the agents in Malaya, and the cost of direct shipment. The amount of rubber smuggled into Thailand from Malaya appears, however, to have been larger than the flow of rubber in the opposite direction, as trade statistics show rubber exports to have exceeded Thailand's rubber production (especially in 1949), the difference being due probably to the

net volume of commodity arbitrage in rubber. In 1947, rubber exports were 21,750 metric tons and production was 21,330 metric tons. In 1948, the corresponding figures were 95,000 metric tons and 80,000 metric tons.

CONCLUSION

The above review indicates that the Bank of Thailand's policy was to build up its dollar reserves in preference to sterling and rupees. Though the sterling assets of the Bank as of the end of October 1949 were larger than in 1946, the increase was proportionately less than the over-all improvement in the reserve position during that period. The rupee assets in 1949 of the Bank declined appreciably below those of 1948.

The improvement in the domestic economic situation was reflected in the postwar appreciation in the free market rate of the baht in terms of sterling and the U.S. dollar. In 1948 the free market rates were generally stable around 60 baht for sterling and 20 baht for U.S. dollars. In 1949 there was a tendency for the baht to depreciate in terms of the U.S. dollar, especially during the last quarter of the year after the decision was taken to peg the Bank of Thailand's selling rate at 57.00 baht per £1. Subsequent to this decision, the open market rate for sterling, which had fallen after the latter part of October 1948, remained relatively stable around the Bank's selling rate and the U.S. dollar appreciated to over 24/00 baht in January 1950.

Thailand suffered a serious inflation during the war. Since the war, the increase in the money supply has approximated the rate increase in production, and the Government's practice of sterilizing exchange profits from the sale of official sterling in the free market has been an important disinflationary factor. The ability of the Bank of Thailand to control the lending operations of the commercial banks is, however, restricted by the relatively low volume of bank credit and the strong reserve position of the banks, which minimizes their need to seek accommodation from the Bank of Thailand.

New problems for the banking system of Thailand will arise when the Government goes forward with the large-scale development program which it is now contemplating. As in so many other underdeveloped countries, the existing financial institutions are not in a position to make a substantial contribution to such a program. In the field of agricultural development, which is by far the most important area requiring attention, public or semi-public financing will have to assume the major role, but the difficulty will still remain of avoiding unduly inflationary repercussions in carrying out such a program in a country where savings are small and inadequately mobilized. Foreign assistance is being sought by the Government.

ECONOMIC OUTLINE OF BURMA

Area and Boundaries:—The Union of Burma occupies an area of 261,610 square miles. The country extends geographically from approximately 92° to 102° east longitude and from approximately 10° to 28° north latitude. Burma is bounded on the east by Thailand, French Indochina, and China; on the north by China and India; on the west by India, Pakistan, and the Bay of Bengal; and on the south by the Andaman Sea and the Gulf of Martaban.

Natural Regional Divisions:—The principal regional divisions are (1) the sparsely populated mountainous area in the west and north inhabited by a variety of non-Burmese races; (2) the Shan plateau in eastern Burma with its rich resources of lead, zinc, copper, and silver; (3) the Tenasserim coast, a narrow strip with tin and tungsten ores which projects 500 miles southward along the Malay peninsula; and (4) the Irrawaddy valley and adjoining Sittang lowland which are the heart of Burma with most of the agricultural land and population. The entire rice surplus of Burma, which formerly provided about 40 percent of the rice products normally entering world trade, comes from the Irrawaddy delta and nearby areas. Thus, with mountains forming the entire land frontier, the economic and political life of Burma is confined mainly to the valleys of the Irrawaddy, the Sittang and the Salween rivers which run in a north-south direction to the Andaman Sea and the Gulf of Martaban.

Climate:—The climate throughout, at low to moderate altitude, is tropical, with a well-defined rainy season from

Thailand is not accustomed to multiple exchange rates or to exchange controls, and those which it now has were adopted as an aftermath of war-time dislocation. The various measures adopted by the Government since 1947 have had the effect of relaxing controls and simplifying the exchange system.

By early 1950 considerable progress had been made in restoring a unitary exchange rate based on the rates in effect in the free market. Except for a small fraction of imports, transactions in foreign exchange are based on rates prevailing in the free market. This is also true of most exports, despite the fact that proceeds from rice are sold at the official rate by the rice monopoly to the Bank of Thailand, and the Bank of Thailand sells the proceeds at the free market rate.

The existence of the broken cross rate in Hongkong and other markets makes stabilization of the baht rate a more difficult, though not necessarily insuperable, task. In view of the favorable balance of payments position and the relatively stable price levels of the country, this appears to be the chief obstacle to stabilization of the currency.

the middle of May to the middle of October. The rains accompany the southwest monsoon, which comes from the Indian Ocean. The Arakan area has an average rainfall of about 200 inches; Rangoon, the capital, about 100 inches. The west of Burma, lying in the lee of the Arakan range, has a rainfall of from 20 to 50 inches and is known as the dry belt. The city of Mandalay lies in this region and receives a rainfall of a little over 30 inches. The hottest season of the year comes immediately before the rains in March, April, and early May, and immediately following the rains in October, when shade temperatures of nearly 100 deg may be expected in the Irrawaddy Delta. December and January are the coolest months, when shade temperature in southern Burma may fall to 65 deg. The Irrawaddy Delta and the coastal areas are very humid throughout the year. In Upper Burma, however, hill stations at altitudes ranging from 1,000 to 4,000 feet provide a comparatively cool and pleasant climate.

Population:—The latest census, taken in 1941, placed the total population at 16,823,798. Burma is essentially a rural country, only two towns having more than 100,000 inhabitants—Rangoon with 501,219 (1941), and Mandalay with 163,527 (1941). During 1948 and 1949 there has been a considerable increase in the population of Rangoon, which is currently estimated at close to three-quarters of a million. Based on the 1941 census, Burma's population density was the lowest in Southeast Asia, with 72 to the square mile.

Language:—The latest break-down of Burma's population into language groups is based on the 1931 census, which showed that, out of a total population of 14,647,756, indigenous languages were spoken by 13,358,904; Indian languages by 1,079,820; Chinese languages by 178,316; European languages by 27,895; and other languages by 2,821. These statistics do not measure the extent to which individuals use more than one language. According to the 1931 census, approximately 1.9 percent of the male population and 0.4 percent of the female population were believed to be literate in English.

Form of Government:—Under the Government of India Act of 1935, Burma was detached from British India (April 1, 1937) and made a self-governing unit of the British Empire. Burma became an independent nation completely outside the British Empire and Commonwealth on January 4, 1948, and is now a sovereign independent republic known as the Union of Burma. The Government is headed by the President, who is elected by both Chambers of Parliament. The Prime Minister, who is the executive head of the Government, is appointed by the President on the nomination of the Chamber of Deputies. The Cabinet Ministers are appointed by the Presi-

dent on the nomination of the Prime Minister. Under the provisions of the constitution, Parliament is composed of two Chambers, both of which are elected by the people. The Chamber of Nationalities, which would be the upper house, would comprise 125 members and would provide specific representation by area. The lower house, the Chamber of Deputies, is composed of 150 members elected in proportion to the population. The Chamber of Nationalities has not yet been chosen, and the Chamber of Deputies exercises full legislative powers.

PRODUCTION

Essentially an agricultural country, the Burmese economy is dependent largely on the production of rice, of which Burma is the world's greatest exporter. The Irrawaddy Delta and the lower valleys of the Sittang and Salween rivers, together with parts of the Arakan and Tenasserim coasts, constitute an area of over 10,000,000 acres devoted almost exclusively to rice cultivation. In 1940-41 production of rice paddy took up approximately two-thirds of Burma's total acreage, or 12,518,000 acres of a total cultivated area of 18,814,798. Rice acreage for 1948-49 was estimated at approximately 10,240,000. Civil strife is expected to cause a decline of 20 percent in rice acreage in 1949-50, with a resultant exportable surplus of approximately 850,000 long tons. In 1948 Burma exported 1,216,490 long of rice, most of which was moved to port prior to the intensification of civil strife. Prewar exports averaged approximately 3,000,000 long tons.

Other crops and the approximate acreage for 1948-49 (with acreage sown and matured in 1940-41 in parentheses) are estimated as follows: pulses, 1,000,000 (1,449,000); sesamum, 887,000 (1,353,000); peanuts, 419,000 (781,000); and cotton, 190,000 (418,000). Statistics on acreages in minor crops for 1947-48 (with 1940-41 in parentheses) are millet, 565,000 (450,000); maize, 198,000 (214,000); and tobacco, 132,000 (134,000).

In 1941 about 111,000 acres of land were devoted to rubber, with production estimated at about 14,000 long tons. As a result of the war, production has fallen off considerably, probably 25 percent of the prewar acreage having been destroyed.

It has been estimated that forests occupy as much as 145,300 square miles, or 56 percent of the total land area. The Forest Department in 1940 estimated that accessible teak forests occupied about 17,700 square miles. Before the war Burma exported approximately 225,000 tons of teak annually, valued at over \$9,000,000. The export of teak is currently at a standstill because of the inability of operators to get logs to milling and port facilities.

Prewar Burma was a large producer and exporter of petroleum and petroleum products, but this industry has not been rehabilitated since the war because of unsettled political conditions. Burma is consequently a net importer of petroleum products at the present time.

Normally an important exporter of minerals, Burma since the war has exported only relatively small quantities of refined lead, zinc, tin, wolfram, and antimony concentrates. The production of these minerals is currently at a standstill because of transportation and other difficulties resulting from continued civil strife.

TRANSPORTATION

Railways:—The Burma Railways are state-owned and normally operate freight and passenger service over 2,060 miles of 1-meter-gage track. In June 1948 only about 600 miles were in operation because of the civil war. The main line is from Rangoon to Mandalay and on to Myitkyina. Other trackage runs from Mandalay to Lashio. Two branch lines run from Rangoon west to Bassein and north-west to Prome, and the line to the south from Rangoon to Moulmein and on to Ye, where it was connected with the Burma-Siam railway during the war. This international connection, however, has not operated since the war.

Inland Waterways:—The Irrawaddy river is navigable for 600 miles, and its tributary, the Chindwin, for 300. These two great rivers, together with the Sittang and the Salween, have been for centuries the great arteries of transport for Burma's commerce. In other parts of Burma there are many less important rivers and streams which are mostly navigable by small craft. Of particular importance is the area of the Irrawaddy Delta, which is so cut up by streams that inland navigation is the only feasible means of transport.

Highways:—Because of the general use of water transport Burma's roads are not extensive. Of a total prewar mileage of 17,000, there are 6,263 miles of all-weather vehicular roads. Many thousands of miles of road are usable during the dry season only.

Aviation:—The main airport for Burma is Mingaladon, about 12 miles from the center of Rangoon. It is in every sense an international airport, handling considerable international traffic. A number of the major air services use it. Rangoon also has been a port of call for British Overseas Airways Corporation flying boats, which land in the Rangoon river. Burma has some 19 other airports serviceable for small to medium-sized aircraft. The Government operates a small internal air service for both passengers and freight and is believed to be planning to enlarge and extend this service. The nationalized Burmese airways have chartered the services of

private air-lines in view of the importance of air transportation since the war.

Ocean Shipping:—The principal port is Rangoon, on the Rangoon river about 21 miles from the Gulf of Martaban. Considerable dredging is required to keep it open for medium-sized vessels with a draft not exceeding 27 feet. In 1948 oceangoing vessels entering the Port of Rangoon accounted for a freight tonnage of 2,042,009. This tonnage figure exceeded the combined total handled by the only other ports of any consequence, which are Kyaikpyu, Akyab, Bassein, Moulmein, Tavoy, and Mergui.

The port of Rangoon has seven sea-going steamer berths with a depth of 25 feet alongside at low water. Both anchorage and wharfage facilities at the port of Rangoon are frequently inadequate. A dockyard capable of repairing a medium-sized vessel is available. The storage warehouse facilities at the port are adequate. The quay is served by one 40-ton crane on track, one 8-ton crane, and 14 3½-ton cranes, all mobile.

There are no free port or zones in Burma.

COMMUNICATIONS

Before the war the Posts and Telegraphs Department had in operation 656 telegraph offices, about half being railway telegraph offices. The system at that time utilized 33,281 miles of wire. By the beginning of 1948 about 75 percent of the network had been restored to working order and was in operation. Because of insurgent uprisings in various parts of Burma and the seizure of local communications, no reasonable estimate as to the extent of present operations can be made.

The telephone system, apart from the exchanges in Rangoon itself, has suffered from the same conditions affecting the telegraph. At the beginning of 1947, the Telecommunications Department had in operation 53 main and 39 branch telephone exchanges. Thirty-seven of the main exchanges were connected to the trunk network. There were 1,450 telephones in Rangoon and 720 in other towns.

FINANCE

Currency:—The basic unit of currency is the Burmese rupee, equal to 16 annas. The denominations of notes in use are 1, 5, 10, and 100 rupees, with Indian silver and nickel-zinc coins in denominations of 1 to 8 annas used in changing the rupee. The rupee is linked direct to the pound sterling at 1 rupee equal 1s. 6d.

Burmese currency is managed by the Burma Currency Board, situated in London. This Board, which replaced the Reserve Bank of India in the management of Burmese currency was set up in 1946 and began operation on April 1, 1947.

The exchange rate for United States dollars, which had remained constant for some time at Rs. 3.3 (telegraphic

exchange rate for \$1), was changed at the time of the devaluation of the pound sterling to approximately Rs. 4.76=\$1.

The Government maintains an Exchange Control Board which deals with all applications for the purchase of foreign exchange. Dollar exchange is authorized only for essential purchases.

Banking:—Banking and insurance facilities are centered in Rangoon. The British banks affording full banking facilities are: Chartered Bank of India, Australia and China; Hongkong and Shanghai Banking Corporation; National Bank of India; Mercantile Bank of India; Lloyd's Bank; and Thomas Cook and Son. Chinese banks represented are the Bank of China and the Bank of Communications. There is one Dutch bank, the Netherlands Trading Society. Before the war the National City Bank of New York and the Yokohama Specie Bank of Japan both maintained Rangoon branches. Neither branch has been restored since the war. The Union Bank of Burma is the country's Central Bank.

Outside of Rangoon, banking facilities in Burma are negligible. Remittances of funds to and from outlying points may be made through the Posts and Telegraphs Department and through Government treasury offices. The usual rate in negotiating commercial loans is from 6 percent to 8 percent per annum.

Insurance:—The bulk of insurance is underwritten by British companies. There are 71 fire insurance companies, 38 marine insurance companies, and 37 accident insurance companies represented in Burma.

There are no reliable figures available on life insurance companies, their number, or the amount of insurance in effect.

FOREIGN TRADE

Imports and Exports:—Burma is primarily an importer of manufactured goods and an exporter of agricultural raw materials. Burma's postwar export trade is based preponderantly upon the rice industry which, before the war, provided exports averaging 3,000,000 long tons annually and accounted for 40 to 50 percent of the total value of exports. Rice exports for the calendar year 1948 amounted to 1,216,490 long tons. Teak exports in 1948 were estimated at 80,000 cubic tons in comparison with 225,000 in 1940. Minerals and ores which formerly provided about 12 percent of the value of exports furnished only 3 percent in 1948. Petroleum products which formerly supplied about 25 percent of the value of exports are now an important import.

Postwar imports have consisted chiefly of cotton textiles, petroleum products, machinery, iron and steel, animal and vegetable oils and motor vehicles.

As in the prewar period, Burma's trade is conducted almost exclusively with the sterling area. India is the

principal market and ranks second to the United Kingdom as a supplier.

Tariff Structure.—Burma is a member of the imperial preference system and consequently accords preferential tariff treatment to imports from sources in British Empire and Commonwealth, with India and Pakistan accorded the greatest degree of preference.

Controls on Trade.—Burmese rice, which is virtually the backbone of the economy, is exported entirely on Government account and shipped in accordance with allocations determined by the United Nations Food and Agriculture Organization. Rice allocations discontinued after January 1, 1950. Burma's other exports are subject to export license control. All foreign exchange receipts from foreign trade must be surrendered to the Government.

All Burmese imports are subject to import control, with restrictions particularly strict with regard to purchases from hard-currency areas. Licensed imports are limited to products which are considered to be essential to the Burmese economy.

TRADING POTENTIALS

Purchasing power.—There are no statistics available regarding the national wealth of Burma. However, the country obviously has a considerable economic potential. For a population of about 17,000,000, there were 18,814,798 acres under cultivation in 1940 and 1941, and 19,031,102 acres were described as "culturable waste." Mineral resources are appreciable, particularly petroleum and lead; the Bawdwin Mine in the Shan States is said to be the largest of the world's lead mines. Mawchi Mine might rank first among individual tungsten mines and third among individual tin mines. These installations are at present shut down because of civil strife.

Bank deposits.—On September 9, 1949, banks held demand deposits of Rs.208,637,947 and time deposits of Rs. 31,409,268, or a total of Rs.240,056,215 (slightly less than \$50,000,000 at the new rate of exchange).

National income.—It has been estimated that national income for the year ending September 30, 1939, was Rs. 1,225,536,000; the figure given for the year ending September 30, 1946, was Rs.2,385,000,000. However, the value of the latter at 1938/39 was only Rs. 693,000,000.

Income by principal economic groups.—Dependable figures on income are not available. Two-thirds of the population follow agriculture as an occupation and most of the national income is derived from the rice crop. The majority of agricultural workers earn a very meager living from their small holdings and are not in a position to purchase imported articles. It has been estimated that 77.2 percent of the Chinese and 55.7 percent of the Indians were engaged in commerce, industry, and transport, compared with only 19.3 percent of the Burmans and other indigenous races.

FAR EASTERN TRADE & FINANCIAL REPORTS

Indian Import Control

The report of the Import Control Inquiry Committee which was set up by the Government of India in July 1950 states that the fundamental problem of import control is that of securing a maximum measure of stability in policy and administration, and the efficient and expeditious implementation of approved policy. The Committee has recommended a minimum annual ceiling of Rs4 billion in the foreign exchange budget for imports during the next two years. It has also recommended that the present

The following figures relating to taxed income in the year ending September 30, 1949, are estimates (in millions of rupees): Total taxed income, 201.5; industrial profits, 6.6; industrial salaries, 40.0; salaries of state servants, 101.0; other salaries, 20.0; and other categories, 33.9.

Retail sales.—Retail sales figures are not available. In the absence of civil strife and of the necessity for trade restrictions there would be an extensive market, not only for textiles, and most consumption goods, but also for durable goods necessary for the mines, oil fields, rice mills, sawmills, and other factories, as well as transportation equipment to develop railways, roads, and river transport.

Other indicators of purchasing ability.—There are estimated to be 32,211 registered automobiles, including 4,526 passenger cars, 16,564 trucks, 6,037 jeeps, and 5,084 busses. A total of 2,934 radio licenses was issued from January 1, 1949, to August 31, 1949. In 1940 there were 6,321 licensed short-wave radio sets. There are approximately 1,800 telephones in operation in Rangoon. (Insurgent activity prevents the maintenance of service more than a few miles outside the city). Approximately 9,000 houses in Rangoon are wired for electricity. Data for areas outside Rangoon are not available, but there is known to be electric service in several other towns. Six principal newspapers, all established in Rangoon (three in English and three in Burmese), have a combined circulation of 34,000. There were approximately 6,500,000 moviegoers during the past year, with gross receipts of about 6,500,000 rupees, of which 30 percent was tax. American films accounted for 42 percent of the total gross, Indian films 31 percent, Burmese 20 percent, British 5 percent, and Chinese 2 percent.

There is little construction of any kind because of insurgent activities and the unavailability of building materials.

Local Customs Affecting Sales.—There has been a strong nationalistic feeling since Burma became independent, and most Burmese prefer the national costume rather than western styles.

order of priorities for imports be revised; pending such revision, it has suggested an order of priorities for the next two years, raw materials and spare parts and accessories for existing industries being at the top.

Other recommendations include decentralization of the licensing procedure, extension of the licensing period, increased facilities to newcomers, provision of greater freedom to import from any country in the soft currency area, and improvement in the efficiency of the import control organization as a whole.

The majority of Burmese live on such a limited budget that imported food is quite beyond their means. In many homes little furniture is used and that made usually from teak. At present thousands live in crude "basha huts" because of wartime bomb destruction, aggravated by an influx of refugees who have fled from insurgent activity.

MARKETING FACTORS

Rangoon, with its population estimated at close to three-quarters of million residents and refugees, is by far the most important city commercially even in normal times. It now handles all but a very small part of Burma's commercial activity and virtually all banking directly or indirectly.

Imported products are sold for the most part through resident agents; furthermore, there seems to be a desire on the part of the authorities to channel all business into the hands of indigenous agents. The Government is the sole exporter of rice. Many long-established firms are said to be finding difficulty in continuing in business in the face of trade and currency restrictions.

Warehousing facilities of the Rangoon Port Commission always exceeded requirements. No goods may be taken into bond unless there is a covering import license. Export licenses are required before any shipments may leave Rangoon.

There are two new advertising firms in Rangoon, though comparatively little advertising is done at present because demand from potential purchasers far exceeds the supply. No commercial credit companies are now in business.

Credit is given much less freely than in prewar days. Most foreign concerns now demand a letter of credit or deposit before shipping to this area. Exporters to Burma should be assured of the issuance of an import license and foreign exchange permit before effecting shipment.

Customs are quite generally those of British business practice and English is the language generally used, except at the retail bazaars, where Burmese, Hindustani, and Chinese are also heard.

It is the desire of the Government to give 60 percent of all import business to Burmese firms.

Indian Trade

Following a trade deficit in each of the five months, April to August 1950, India had a trade surplus of Rs51.4 million in September.

Pakistan Food Exports

The Pakistan Government has suspended all food exports until a clearer picture is obtained of the losses caused by the floods in West Punjab. The wheat yield for this year had previously been forecast at a little less than 4 million tons, of which about 500,000 would have been available for export. The countries primarily affected by the suspension will be Western Germany and Japan, which have wheat contracts—still only partly fulfilled—for 250,000 and 100,000 tons, respectively.

Pakistan's Trade and Payments Agreements

Pakistan and Austria have concluded a one-year trade and payments agreement, effective to July 12, 1951, providing for trade valued at £1.9 million in each direction. Specified amounts of the commodities to be exchanged have been laid down in the agreement. Both parties are to grant each other most-favored-nation treatment in customs duties, taxes and other charges on imports or exports, of payments, and customs regulations and formalities. The payments arising from the agreement are to be made in sterling through Austrian accounts in the United Kingdom, or through other mutually agreed channels.

Pakistan has also concluded a one-year trade agreement with Japan, effective October 1, 1950. This agreement provides for trade valued at about £69.6 million, payment being made in sterling, as in the previous agreement between these two countries. The agreement binds Japan to furnish Pakistan with technological services for the development of various industries, especially cottage industries. During the six months ended June 30, 1950, Pakistan's exports to Japan amounted to the equivalent of about US\$7.4 million, while her imports from Japan were valued at US\$25.6 million.

Under a one-year trade agreement between Pakistan and Switzerland, licenses for the export and import of certain goods will be granted within limits but without commitment as to the specific volume of trade.

Ceylon-U.S. Point Four Agreement

On November 7, Ceylon and the United States signed an agreement providing for Point Four aid for the island's economy. The agreement is more comprehensive than the one between the United States and Iran, which covers only specific projects.

Ceylon's Foreign Trade

In the first nine months of 1950, Ceylon had an aggregate trade surplus of Rs182.4 million compared with a deficit of Rs28.5 million in the same period of 1949. Exports in 1950 exceeded those of the comparable 1949 period by Rs299.3 million, and imports by Rs87.9 million.

In trade with the United States, the surplus increased to Rs198.9 million (US\$41.6 million) in 1950, from Rs20.8 million (US\$6.3 million) in the corresponding nine months of 1949.

U.S. Trade with China

U.S. Commerce Department controls over exports have resulted in a decline in total exports to China from US\$273 million in 1948 to US\$83 million in 1949 and US\$33 million for the eight months through August 1950. Significant quantities of tungsten, tin, tung oil, hog bristles, wool, and animal hair and feathers, as well as tea and spices have, however, been obtained from China by U.S. private traders. Imports of tungsten were 3.9 million pounds in 1948, 4.6 million pounds in 1949, and 6.7 million in January-July 1950.

In the eight months January-August 1950, raw cotton accounted for 83 per cent of all U.S. shipments to China. Recently, however, cotton exports have not been licensed.

Indonesia's Trade and Exchange Insurance

From January to July 1950, Indonesia's exports totaled 901 million roepiah, and imports 622 million. Exports in August are reported to be one-fifth greater than those in July; August import figures are not available.

To protect importers from the possible reduction of the price of foreign exchange certificates, the Foreign Exchange Institute now offers risk insurance at one-half of one per cent per month on the value of the exchange certificate.

ECA Aid to Taiwan

ECA announced on November 1 that US\$3.7 million has been allotted to Taiwan to finance the purchase of U.S. equipment and technical services needed for five power projects as follows (1) \$1.0 million for purchases of material and equipment for the island's existing transmission and distribution systems; (2) \$1.5 million for equipment and materials for the station, substation, and transmission lines of the Tien-Leng hydroelectric power project, on which construction work is now being carried on by the Taiwan Power Co., (3) \$669,000 for the rehabilitation of the typhoon-damaged Li-Wu hydro plant on the east coast of Taiwan, and completion of a cross island east-west transmission tie-line; (4) \$316,000 for an additional transformer bank of 40,000 KVA for the Taipei primary sub-station; and (5) \$207,000 for two coal pulverizer mills for the Pei-yu steam station.

JAPANESE EXPORT INDUSTRIES

Hardwood

Most of the logs for Japanese hardwood lumber are produced in Hokkaido. Of one million koku of oak logs turned out annually, 600,000 koku is fit for export. Estimated amount of export of hardwood lumbers for 1950 fiscal year is 200,000 koku, while the export program for each quarter period is as follows: (1 koku=120B/M)

April—June	80,000 koku
July—Sept.	70,000 "
Oct.—Dec.	30,000 "
Jan.—March	20,000 "

Possible amount of export depends upon the quantity of logs cut in winter. The logging program for every year is drafted around October, and felling begins with November. By the thawing, the lumber are carried into the timber yard, and around April, when thawing begins, the logs are transported into the saw-mill. The lumbering and seasoning of hardwood are done during the period from spring to fall. Of the process work, seasoning is most important. To fulfill the shipping condition so called "Shipping Dry," it takes three months for lumber less than one inch thick, four or five months for those of one to two inches thick, and six months for lumber more than two inches thick under the process of natural seasoning.

Following countries are the principal markets for hardwood lumber:—United Kingdom, South Africa, New Zealand, Hongkong, Holland, West Germany, Belgium, Ireland, Egypt, America.

The record of hardwood export in the postwar years is as follows:— Of the export schedule of 200,000 koku for 1950, 140,000 koku have been shipped already. Inquiries are arriving from various markets, particularly from Belgium and the United Kingdom for large quantities.

The prices of logs are steadily rising, average prices of lumber are given below: (US\$, per 1,000 B/M FOB)

Oak	150
Birch, Beech & Ash	135
Sen	127.5
Elm, Katsura, etc.	120

Some fifty firms now are handling export of lumber and they play an important role in financing the manufacturers. Y997,992,000 is required for the production in and after September alone, and terms of the loans covering collecting expenses of logs (Y368,460,000) and the log production (Y629,532,000) are three to six months and three to twelve months respectively. The preparation of the funds is not easy, however, this difficulty will be alleviated if the funds for winter production are procured from the banks.

Export (1947—1950)

	Quantity (1,000 B/M)	Amount (\$1,000)
1947	20	3.5
1948	5,642	841.9
1949	18,250	2,791.1
1950 (Jan.-June)	unavailable	2,185
Total		5,821.5
(1,000 B/M=8.33 koku, 1 koku=120 B/M)		

Export (By Country) (\$1000)

	1947	1948	1949	Jan./June 1950	total
America	3.5	87.2	175.1	2,185	596.8
Australia	—	62.3	12.2	—	74.5
Belgium	—	529	1,675	912	3,116
Egypt	—	2.1	58.4	87	447.5
New Zealand	—	54	364.6	287	824.6
South Africa	—	7.3	53.7	153	214
Holland	—	—	120	82	202
United Kingdom	—	—	—	214	214
Others	—	—	23.1	119	142.1
Total	3.5	841.9	2,791.1	2,185	5,821.5

Fertilizer

AMMONIUM SULPHATE

The War in the Pacific dealt a destructive blow to Japan's ammonium sulphate industry. After the war's end, this industry achieved resuscitation and regained its prewar level of production by 1949.

Hostilities were terminated by Japan's surrender in 1945. But, on account of war disasters and due to its conversion into munitions industry during wartime, the ammonium sulphate industry in Japan suffered immense losses and was practically wiped out. Furthermore, owing to the short-

age of materials for operation and repairs of the works, as well as on account of scanty supply of raw materials, most of those works were obliged either to suspend or curtail production: The production of ammonium sulphate in August, 1945, was 5,000 tons only and its production for the twelve months ending December that year was 240,000 tons, representing only 19 percent of its production in 1941. Under such circumstances, increase of food production and maintenance of food supply were demanded in all quarters as essential measures for the economic revival of defeated Japan. As an essential pre-requisite for food production

increase, speedy restoration of chemical fertilizer industry was urged all over the country which gave rise to the enactment of required laws.

In 1945 the Fertilizer Production Urgent Measures Council was established and in 1946, several urgent measures were decided to augment the production of chemical fertilizers including a program to produce 2,000,000 tons of nitrogenous fertilizers by 1948. In May, 1945, a GHQ memorandum directing synthetic measures to augment the production of chemical fertilizers was delivered to the Japanese Government. Coal, iron and steel industries were designated as key industries indispensable for the resuscitation of chemical fertilizer industry in Japan, and those industries were strongly subsidized by the Government. At the same time, the distribution of chemical fertilizers as specified goods was placed under the control of the Fertilizer Distribution Corporation. Besides, for restoration of production facilities which had been destroyed in war, national fund was placed within the reach of interested parties. Meanwhile, distribution of fertilizers was conducted under the individual price system (later replaced by the collective price system). These measures were supplemented by a subsidizing system in favor of all manufacturers of fertilizers. Thus, restoration of Japan's fertilizer production industry was accelerated.

Thanks to the Government's policy to subsidize this special line of industry as well as to the efforts exercised by all manufacturers to overcome difficulties in their way, ammonium sulphate production in Japan began to show a steady increase and its output in the year 1949 reached 253 taking the production for the year 1946 as 100, thereby registering an increase of over 150 percent against the figure of only three years before. The output in 1949 amounted to 1,180,000 tons, regaining the prewar level of production.

The Nine Points Economic Rehabilitation Programme announced in December, 1948, and the announcement of the Dodge Line of economic policy in March, 1949, necessitated a fundamental change in Japan's economic policy, involving the adoption of a "dis-inflation" policy. This resulted in the abolition of official prices and of control on materials distribution, as well as in the eventual cancellation of the price difference loss compensation system. This marked the first step toward the speedy restoration of free economy. In the meantime, the abolition of distribution control on fertilizers and the cancellation of price difference compensation for fertilizer manufacturers in keeping with the then anticipated dissolution of the Fertilizer Distribution Corporation became important objects of discussion. Eventually, the Corporation was abolished at the end of July, 1950, marking the end of distribution control on chemical fertilizers which had been in practice since 1939. Thus, beginning August 1st, 1950, chemical fertilizers in Japan are handled as objects of free transactions.

The production of ammonium sulphate in Japan which regained its prewar level in 1949 is since showing a steady increase, and it is expected that by January 1951, Japan's chemical fertilizer industry will attain an annual production capacity of 2,000,000 tons against the 1,700,000 tons to be turned out in the twelve months ending December 1950.

In spite of its speedy revival, however, the supply has always fallen short of the domestic demand which grew larger by leaps and bounds on account of the urgent necessity to augment food production. In order to supply the shortage, therefore, 240,000 tons of ammonium nitrate were imported in 1947, which was followed by the import of 280,000 and 180,000 tons of the same in 1948 and 1949 respectively. In the seven months ending July last 80,000 tons of ammonium nitrate, besides 150,000 tons of ammonium sulphate, were imported.

Since the war's end, Japan's agricultural industry has been exposed to constant trouble and difficulty due to the shortage of chemical fertilizers. Thanks to the revival of her chemical fertilizer industry, Japan has been relieved of such trouble since 1949 when the industry regained its prewar level of production. Ever since, the production of ammonium sulphate in Japan is steadily increasing, and at present Japan is in a position to satisfy her own demand. Recently, due to the outbreak of war in Korea, the chemical fertilizer works in Japan are required to supply the shortage of fertilizers in the Far East including Korea. The export of chemical fertilizers from Japan is still conducted under national control.

Beginning August of 1950, the distribution control on chemical fertilizers has been abolished. At the same time, the national policy to subsidize the chemical fertilizer industry has also been discontinued. This has revolutionized the position of Japan's ammonium sulphate industry because, ever since the war's end, the chemical fertilizer industry in Japan has been supported by the national subsidy.

Post-war Production and Import of Ammonium Sulphate

Year	Output (MT)	Import (MT)
1945	243.021	
1946	496.376	
1947	720.945	*232.870
1948	916.565	*280.478
1949	1,182.170	188.560
1950 (Jan.-July)	878.004	148.893
		* 83.886

(Note) Figures headed by * show quantities of ammonium nitrate.

CALCIUM CYANAMIDE

Immediately after surrender, promotion of chemical fertilizers was taken up by the Government as one of the principal economic programs for the security of national foodstuff supply and the stabilization of living. For that purpose, seven works were converted into fertilizer factories, and eight established factories were repaired

ESTABLISHMENT AND OPERATION OF OVERSEAS AGENCIES OF THE JAPANESE GOVERNMENT

Prior to conclusion of the peace treaty, approval of SCAP has been granted to the Japanese Government to open its overseas agencies. It is remarkable that America has taken the initiative and permitted the overseas agencies of the Japanese Government to be opened at five places in that country, while recommending her example to be followed by other allied nations.

ed and enlarged. Consequently annual productivity of fertilizer had been promoted to 395,500 metric tons at the end of 1947, as compared with 220,000 tons of 1945.

Due to the import of high grade carbon materials from the United States, and the rationalisation as well as reform of equipments, Japan has 500,000 tons productive capacity as of October 1950.

Along with the expansion of the equipments, the records of production also are on an upward trend.

1937 (pre-war peak)	256,739 (M.T.)
1945	124,827
1946	181,886
1947	212,919
1948	227,799
1949	339,512

Export of calcium fertilizer began with 1930. The principal markets of the fertilizer were those of the Far East. The peak figure of the pre-war period was when 11,438 metric tons were shipped to those markets in 1933, but no export was recorded after 1938.

However, in 1935, 43,000 tons of the fertilizer were transported to Korea and Formosa. It is believed that there are potential annual demands of about one million tons in the Far East, so the future prospect of the export seems bright. If four hundred thousand tons are consumed in the domestic market, export of one hundred thousand tons will be possible when the Korean War is settled.

As for the import of carbon materials for this industry, Japan depended chiefly upon the anthracite of French Indochina, however, during the war, the domestic lower grade coke was used, accordingly the quality of the products was lowered. After the war, since June, 1948 the use of anthracite and petroleum coke of the United States, the cokes of Indonesia and South Africa made the industry to produce higher grade fertilizer which contains 21 percent nitrogen. In this way, the industry has regained and surpassed the prewar record.

The control on the price and distribution of fertilizers was lifted on the 1st of August this year and the fertilizers are now transacted in free market.

Since the abolition of the control system the promotion of the fertilizer industries must depend upon the export trade.

Under date of April 19, 1950, the Japanese Government promulgated "Law Concerning the Establishment of the Overseas Agencies of the Japanese Government." The business affairs to be handled by those overseas agencies which are prescribed by the law are aimed at the promotion of Japan's foreign trade.

SUPERPHOSPHATE

The war-damage to the super-phosphate fertilizer industry was rather small and it is natural that the rehabilitation of its productivity was achieved within a short period. In August 1945, immediately after the surrender, thanks to the Occupation Authorities, the import of phosphate rocks was allowed. At first it was imported only from Kitadaito Island, one of the Ryukyu Islands, however, present suppliers of the material are the United States, French Union, etc.

With the growing import of the material, the output of super-phosphate fertilizer increased year after year. Following figures show how the manufacture of the fertilizer has been augmented in post-war period:

1946	168,000 metric tons
1947	706,000 "
1948	993,000 "
1949	1,231,000 "

The quantity produced in 1949, approached the figure for 1938 (1,233,000 tons) and it is more than 74 percent of the pre-war peak. (i.e. 1,644,000 tons for the year 1940)

Regarding the productive capacity under the present condition, 2,350,000 tons superphosphate fertilizer will be produced annually.

Of the materials, pyrites are available in Japan, therefore the promotion of the production of fertilizer depends upon the import of phosphate rocks. After surrender more than 2 million tons of phosphate rocks have been imported, figures for respective years being as follows: (metric ton).

1945	35,000
1946	195,035
1947	1,128,837
1948	419,000
1949	332,000

Before World War II, Formosa and Korea consumed one 160,000 tons in total, and British India imported forty or fifty thousand tons from Japan annually. After the war, although there have been inquiries from India and East Africa, the export of fertilizer is not so active. The first post-war export was recorded when several thousand tons of the compound fertilizer were sent to Ryukyus in December last. In May 1950, 3,500 tons were exported to the same country. Furthermore, Ryukyus will again purchase 8,500 tons during the last quarter of 1950.

1. Promotion of trade between Japan and the country where Japanese agencies are established.
2. Investigation of market conditions and economic circumstances of the foreign country.
3. Transmission to the home government of information concerning foreign trade and commercial laws and ordinances of the foreign country, and supply of similar information on Japan to foreign governments.
4. Giving assistance in connection with trade between Japan and the foreign country concerned, and giving of information in reply to inquiries about trade.
5. Displaying of samples of Japanese commodities for export, and supply of information concerning Japan's economic circumstances.
6. Giving of information in reply to inquiries about travelling in foreign countries and supply of information concerning travelling in Japan.

Japan will thus also be gradually relieved of the inconvenience arising from "blind trade," and her foreign trade will be put on the road to greater development. Furthermore, Japanese boats have been permitted to go into commission on more foreign lines than heretofore, while Japanese firms have been allowed, in principle, to establish their branch and subbranch offices in foreign countries. Thus, the time is not far off when Japan may effect greater development of her foreign trade.

Establishment of the Overseas Agencies in America, and Its Reaction.

Overseas agencies of the Japanese Government have been opened in five places in America, viz. New York, San Francisco, Los Angeles, Seattle and Honolulu, and persons in charge arrived at their respective posts at the beginning of May this year, and business was started in the middle of the month. During the six months that have elapsed since much has been done to accelerate trade between Japan and America and, through America the trade between Japan and Canada and the countries in Latin America, and great have been the benefits derived in receiving illumination, warning about Japan's export industries, and no smaller has been the service rendered to foreign countries through the supply of required information about Japan.

In the first place, the establishment of the overseas agencies has enhanced the interest of the people in America and other countries relating to the trade with Japan. Japan's overseas agencies have been brought into close touch with Chambers of Commerce and the Business Bureaus of the Ministry of Commerce with which exchanges of materials and news are being conducted. The Chambers of Commerce in different places are showing cooperation in pushing trade interests with Japan. For instance, the Trade Section of

the San Francisco Chamber of Commerce held a meeting, marking May 10 as Japan Trade Day, and on June 20, the Japan Trade Study Conference was held at which they listened to the explanation from the members of Japan's overseas agency in that city. In the meantime, the Chamber of Commerce of Los Angeles appointed a Japan Trade Special Commission with prominent bankers and traders of the city as its members. Beginning with its first meeting on June 23, the Committee is expected to hold a regular meeting once a month. The same cooperation is being extended by the Chambers of Commerce of New York and Seattle.

One of the remarkable activities of these overseas agencies in America is the rapid increase of American exporters and importers requesting the assistance of these overseas agencies in contacting them with reliable exporters, importers, or manufacturers of Japan. In spite of resumption of foreign trade by private trading houses of Japan and permission given to Japanese traders to visit overseas markets, most of them have no direct relations with American traders. Besides as a result of the dissolution of financial cliques and due to deconcentration of excessive economic power, the Japanese trading houses of world-wide fame, such as Mitsubishi, Mitsui, etc., have been replaced by a large number of large and small trading companies. Therefore, with the exception of few foreign firms with their branch offices in Japan whose business relations were already extended in Japan, most of the trading houses abroad were unable to select reliable Japanese traders to deal with or to obtain any information concerning the trading capacity of post-war Japan. Thus they were left without knowledge as to the kinds and quantities of goods Japanese traders were ready to import or export. It was under such circumstances that the overseas agencies of the Japanese Government were established in America for the purpose of promoting the trade between Japan and other countries.

The overseas agencies are making constant investigation concerning the economic tendency in America. They are exercising efforts to find out what must be done to make Japanese commodities more acceptable to the American markets. For instance, they have given proper directions and warnings to all interested parties in Japan concerning the constant fluctuation in the market price of raw silk, unsuitable designs of silk goods, underselling competition by canned goods dealers, defects in bamboo ware, improvement of packing, quality of Japanese toys, delay in shipping, difference between samples and goods supplied, etc. The agencies give useful data and suggestions concerning the tendency on foreign markets or

about the change in the taste of consumers. On the other hand, Japanese manufacturers and exporters who have been left without knowledge concerning foreign markets owing to many years' isolation of Japan from other countries, are flooding overseas agencies with applications for assistance in establishing business relations with right parties abroad, by sending samples and catalogues of goods they deal in, either directly or through the Government offices at home. There are also a great many trading houses lodging their applications with those agencies for detailed information of the market condition relating to special kinds of goods, or for investigation of different matters.

Increase of Overseas Agencies.

In order to overcome the difficulties arising from the "blind trade," and strengthen the understanding between Japan and other countries it is desirable to establish overseas agencies of Japan in most of the principal cities all over the world. Consent to establish Japanese overseas agencies has been given by one country after another. Consequently, Japanese overseas agencies are expected to be shortly opened in New Delhi, Bombay and Calcutta of India; Karachi of Pakistan; Paris Stockholm Rio de Janeiro and San Paulo of Brazil. The establishment of similar offices in Belgium, the Netherlands, as well as in Uruguay has been decided. Furthermore, Japan is expecting to see the establishment of her overseas agencies in Thailand, Burma, Indonesia and Egypt. Japan wishes that the U.K. and her autonomous dominions would consent to the establishment of Japanese agencies.

Future of Japanese Overseas Agencies

In case of the conclusion of a peace treaty, the residence of Japanese abroad, and the visits of Japanese ships to foreign ports would gradually be restored and economic activities, particularly foreign trade could be carried on for the first time on an equal footing with different countries. The overseas agencies would shift a part of their present duties to the shoulders of those who are actually interested in business transactions, and their character would be modified in such a way that they would undertake to discharge the duties of Japanese official institutions abroad, and either directly or indirectly they would make efforts toward the development and acceleration of Japan's economic relations.

Under present circumstances, the establishment of branch and subbranch offices of Japanese trading houses is by no means an easy matter, although the approval of SCAP in principle has already been obtained. Meanwhile, Japan's overseas agencies constitute the front organ of direct contact between the government officials and people abroad.

THE JAPANESE ALGINIC ACID INDUSTRY

Alginic acid, which is a chief cell wall constituent of seaweeds, especially of brown algae, (*Laminaria*, *Ecklonia bicyclis*, etc.), was discovered in 1883 by Stanford, a Scotch chemist. Since then its production has been carried on in Norway, France, Russia and the United States, but it was only in the United States that large-scale production was developed.

In Japan, experimental production was carried on between 1927 and 1939, and it was in 1935 that full-scale production was started, achieving an output of 68 metric tons in 1943. Such a wartime upsurge of production was probably due to the use of the article for military electric equipment. The production, however, after the peak year of 1943 suffered gradually from the effects of the war, and its output declined to only 15 metric tons in 1945. Since the end of the war, however, the alginic acid industry has been encouraged by the occupation authorities as an industry advantageous to Japan which is rich in algae resources, and has been rapidly expanded to help the export trade. The number of factories engaged in the production reached 55 between the end of 1946 and the first half of 1947, but the rationing of primary and secondary materials and coal and the shortage of funds have forced the weaker makers to discontinue, and only about a dozen factories remain in the field at present. Thus the alginic acid industry, after the experience of an overzealous effort for the past three years, has just started on a full-scale basis. Its export in 1949 amounted to 2,550 lbs.

Manufacture and Uses

The process of manufacturing alginic acid is briefly as follows: (1) Sorting and cutting of raw seaweeds. The seaweeds are washed in water and then cut into pieces 5 inches long. (2) Preliminary treatment. The clean seaweeds are soaked in a tank, and adding weak solution of hydrochloric acid or alkali, is heated for 4-8 hours. (3) Melting. The material is then put in a melting tank with the addition of soda-ash and water, and is stirred and melted till it becomes paste-like substance.

(4) Dissolving. The paste-like substance is dissolved in 5-10 times water. (5) Straining. The solution is strained by the centrifugal separator and filter-press to obtain pure liquid. (6) Coagulating. After the strained liquid is bleached, sulphuric acid or hydrochloric acid is added to precipitate alginic acid gel. (7) Dehydrating and neutralizing. When the gel is divested of moisture neutralized by the addition of soda-ash or caustic soda, alginic acid paste is obtained.

(8) Drying and refining. Alginic acid paste is divested of moisture, salt and other impurities by the addition of alcohol and dried by the process of vacuum drying or ultra-red drying, but sometimes it is dried by spraying or direct heating without using alcohol. (9) Pulverizing. The dried stuff is pulverized into powder of desired fineness. (10) The finished goods are packed in moisture-proof cans, and shipped to the market. Paste is sold in casks.

The time required for the process mentioned above is 10-15 hours, but there is yet much room for improvement as to the kinds of extracting agents used, the separation of dregs, drying, straining, and bleaching. Unit requirement of raw materials for one kilogramme of refined alginic acid is as follows:

Raw Material	Konbu (Tangle) or Kajime (Kelp)	8 tons
Subsidiary Materials	Soda-ash	9 "
	Caustic soda	1.5 "
	Sulphuric acid	0.5 "
	Bleaching powder	3.0 "
	Alcohol	0.5 "
	Coal	0.6-1.0 Kg.
	Electricity	14 tons
	Water	8,000 KWH
		2,000 tons

The essential prerequisite for the expansion of sales of any new product is the development of its uses, and in the case of alginic acid new uses are steadily found for it and the demand for it is expected to rise. The following are some of its principal uses:

(1) Edible stuff. Ice-cream, ice sherbet, mayonnaise, thick sauce, chocolate, marshmallow, pudding-powder, milk, soft drinks. (2) Textile sizing. Sizing in printing, warping and finishing, and other sizing in general. (3) Pharmaceuticals and cosmetics. Dental impression mould, jellies, styptic, solidifying constituent of pills, ointments, surgical suture, penicilline for internal use, dental paste, soap, pomade, setting lotion, shampoo, milky liquid. (4) Industrial uses. Water paints, water-proof agent for cloth, binder, softening agent for hard water, boiler cleaning solution, leather finishing, paper sizing and coating, ceramics, impression mould paste, adhesive.

Such uses for alginic acid indicate the following properties of this product:—

(1) The water solution is limpid and strongly viscous, even 1 per cent solution having viscosity, and with the increase of the percentage of alginic acid added, viscosity increases logarithmically. (2) The solution is uniform colloid, easy of solution with gums, soap, starch, sugar, glycerine and protein. (3) Unlike agar-agar or glycerine it is not congealed even at the low temperature of F 40 deg. below zero nor changed in viscosity, and

therefor it is most suitable as a stabilizer for ice-cream and other frozen desserts. (4) When the solution is compared with gum arabic or gelatine, the latter does not show viscosity unless the density is over 10 per cent, but alginic acid can be viscous even at the one-twentieth density, that is under 0.5 per cent. (5) When it is used for textile sizing, the quantity required is economized, because its viscosity is 2-3 times that of *gloiopeltis* glue of the same density and over 10 times that of tragacanth gum. (6) When used in print-sizing, it is superior to tragacanth gum in that outlines of the designs are clearly finished to minute details. (7) Alginic acid thickening material, either in powder or in paste, simply, dissolved in water, is readily usable without heating. (8) Beside the advantages mentioned above, as the refined stuff has no taste nor smell and is P.H. neutral and its water solution is limpid and without color, it may be used for any purpose, pharmaceutical or edible.

Production

Output of Alginic Acid in recent years

Converted to powder (Power-1, paste 10)

Year	15 metric tons	1946	15 metric tons
1940	26	1947	18
1941	56	1948	62
1942	68	1949	85
1943	51	1950	300 (plan)
1944	19		
1945			

During the war when raw seaweeds were placed under control as the raw material for potassium, the production of alginic acid was drastically reduced and virtually came to a standstill for a year after the end of the war. The production, however, has been resumed since September 1946, and the opportunity for export is gradually opening up.

Since the control of raw seaweeds was abolished in August 1949, the only materials still controlled are such subsidiary materials as sulphuric acid, caustic soda, and soda-ash, and as the black-market prices of these materials are below official prices, it is said there is practically no restriction in respect of raw materials. Therefore the key to the future production is in the expansion of plant by the manufacturers, and the success of the industry will depend upon the smooth supply of funds.

Major producers of alginic acid are Kao Sekken (Kao Soap Co., Ltd.), Kamogawa Kako (Kamogawa Chemical Industry Co., Ltd.), Kimitsu Kagaku (Kimitsu Chemical Co., Ltd.), Iwaki Cement Co., Ltd., Shimane Kagaku (Shimane Chemical Co., Ltd.) and Toyo Algin Co., Ltd. Kao Sekken Co. is planning to increase their monthly output by 5 metric tons with the loan out of the U.S. Aid Counterpart Fund, and Kamogawa Kako, Hokkaido Kohatsu, and Shimane Kagaku are also planning to expand their plants.

Domestic Market

4

As this product, having been introduced only a short time ago, is yet little known generally, many difficulties are still anticipated in expanding its sales, but the market is gradually being developed with the growth of the industry. Not only as a material necessary for foodstuff production as described previously, but also as a sizing material in textile printing, it is ten times as effective as dextrine, tragacanth gum, and corn starch used hitherto, and so if it is to be used much in warp sizing in future, considerably larger volume of demand may be expected.

Even at present all the demands from textile production centers are for the sizing material. The breakdown of the domestic consumption is 40 per cent for foodstuff, 25 per cent for textiles and 15 per cent for pharmaceutical uses, the rest being used in the cosmetic industry.

Though all concerns are making efforts to reduce the cost, the smallness of production is after all making it difficult to achieve rationalization. Nevertheless, with the steady growth of production due to the enlarged consumption, the effects of the efforts have gradually appeared in the increased yield rate of raw materials, the reduced expenses for materials and overhead and improved techniques.

Exports

The industry was not in a position to export its products before the war, since production itself was too small. Even after the war the inferior conditions of its plant and equipment made it difficult in respect of the prices for the products to be offered in overseas markets. The actual records of exports are 2,000 lbs. by Kao Sekken Co. in May 1949 and 550 lbs. by Kamogawa Kako Co. in June of the same year, both being sample exports to the United States. Notwithstanding the strict examinations these products were subjected to their quality was highly thought of. The goods to be exported to the United States are required to have as standard quality viscosity of over 1,000 c.p., neutralness and uniformity, and a high degree of moisture and purity. The manufacturers who are now able to meet these requirements are Kamogawa and Kao.

The price of the goods exported in 1949 was 80 cents per lb., but recently it has become possible to sell at 50-70 cents per lb. (over 1,000 c.p. FOB price). Further reduction of cost is necessary, however, since contracts at the level of 60 cents are desired in the United States.

The product is called by other names such as "Algin", "Kelgin", "Manicor", or "Norgin". The country where the largest amount is produced is the United States, which is also the largest consumer of the product. Small quan-

Japan, being surrounded by sea, is endowed with inexhaustible natural resources of seaweeds. Various manufacturings from seaweeds have been carried on from many years ago, and agar-agar manufacture above all has a history of three hundred years, the product having been exported abroad to meet demands for food-stuff, medical use, and industrial use.

There are two kinds of agar-agar, natural agar-agar and scientific agar-agar.

Manufacture and Uses of Natural Agar-Agar

Raw materials for agar-agar consist of red seaweeds, such as *Tengusa* (*Gelidium Elegans* Kg.), *Onikusa* (*Gelidium Japonicum* Okam), *Dorakusa*, *Toriashi* (*Acantho peltis Japonica*), *Hirakusa* (*Gelidium Sub-costatum* Okam), *Ogo* (*Gracilaria Confervoides* Gerv.), *Ego* (*Ceramium Hypnoides* J. Ag.), *Igisu* (*Ceramium Boydeni* Gepp.). The output in Shizuoka, Tokyo and Chiba prefectures accounts for over half of the total volume of production, and is also the best in quality. These seaweeds are collected by fishermen or divers during the period from the end of April to September or October each year, and, after being dried and sorted, are shipped to manufacturing centers.

Agar-agar is manufactured during the winter season, that is, from the latter part of November to the middle of February. The length of time needed for the final process of manufacture, from the freezing to the completion of drying, is from fifteen to twenty days.

Raw seaweeds are washed, bleached, and boiled, and then agar-agar element is extracted by pressing and straining. The agar-agar element thus extracted is poured into a moulding box of wood, and left undisturbed till it is congealed. Then it is cut into pieces of a desired size and spread on a freezing-drying frame out-doors. These pieces are

titles are produced in the United Kingdom, Norway and other countries. It was only 25 years ago that the commercial value of this product was recognized even in the United States. About half of the demand in the United States is for ice-cream manufacturing; during the war when agar-agar from Japan became unavailable, alginic acid was used as a substitute for agar-agar in making dental impression mould base and proved its superiority. Now 200 to 250 thousand lbs. of alginic acid is being consumed for this purpose. Chief producers are Kelco Co., and Algin Corp.

The chief maker of alginic acid in the United Kingdom is Albright & Wilson, who are selling it under the name of "Manicor 1-4"; their product was exported to the United States to the amount of 5,000-13,000 lbs. during 1932-35, but the quality is about 100 c.p. being far lower the Japanese exports (1,000 c.p.).

frozen by the low temperature at night-time and partly dissolved by the heat of the sun in day-time, and through repeating this process several times, impure element is removed in the dripping water, leaving only pure agar-agar. The pure element thus left, after being dried in the sun, becomes the finished product.

Main uses of agar agar may be enumerated as follows: (1) For food-stuff, for making candy, yokan (bean-jelly), jelly, ice-cream, condiment, syrup, jam. (2) Medical purpose, as laxative, anti-diarrhoeic, for stopping thirst, for dental treatment, as a bacteriological culture medium. (3) Industrial purpose, for paint, for paper manufacturing, for agricultural drugs, for printing, for plating.

The proportions for these various uses are different. In Japan, South Seas, Africa, South America and China, uses for food, especially for making candies and cooking account for the major part, while in Europe and the United States much of it is used for industrial, medical and scientific purposes, besides uses in food. For instance the quantity of agar-agar consumed pre-war in the United States was 650 thousand lbs. and the ratios for various uses were as follows:

Laxative	15%
Bacteriological Culture	15
Candy making	15
Bread baking	15
Dental impression mould	12
Meat processing	8
Emulsifier	8
Cosmetics	8
Others	4
Total	100

Production

Output of dried Raw Seaweeds (Kan=8,2673 lbs.)

Year	in Kan
1940	2,761,000
1941	2,585,220
1942	1,671,600
1943	1,477,229
1944	1,211,841
1945	344,208
1946	780,618
1947	1,174,995
1948	1,667,472
1949	1,150,000

Output of Agar Agar

Year	in Kan
1937	708,203
1938	687,731
1939	718,362
1940	656,888
1941	573,384
1942	457,494
1943	530,011
1944	310,889
1945	191,046
1946	73,392
1947	115,221
1948	179,955
1949	333,448

As agar-agar was much used for military purposes during the war and its principal manufacturing centers were in the mountainous districts, it was relatively little affected by the war. Since the end of the war, however, because of the shortage of raw material and of post-war dislocation, the output has declined to nearly 10 percent of the pre-war maximum. With resumption of its export the production climbed, reaching about 333,445 kan in 1949.

The major centres of agar-agar manufacture are Nagano, Gifu and Osaka prefectures, among which the output of Nagano accounts for more than 30 percent of the total.

Most of the agar-agar manufacturers, now numbering 457 are on the basis of private enterprise, and the work is carried on as a side-job of the farming populace. Though the development of this industry so far has been characterized as a winter side-work, it has become a chief line work if viewed in the economic aspect. Nevertheless these enterprises, which are carried on on a small scale in rural areas, are fragile in their economic basis, and it cannot be denied that there is much danger of their falling a prey to dealers with respect to the marketing of products. Owing to such circumstances, the dealers in some areas in the past were lacking in independence, always remaining in a status of subcontractors to dealers, but later when a country-wide organization and the system of designated marketing agency were sponsored by the Marine Product Association, the industry escaped from the commercial rein for a time.

Exports

As agar-agar has a wide range of demand and there was virtually no competition overseas before the war, the exports of agar-agar amounted to an annual average of some 300,000 lbs. in quantity, accounting for 70 percent of the total output. When its major markets are examined in 1936 (when total exports were at the pre-war peak of 3,900,000 lbs.), the United States led with 16%, France coming second with 14%, followed by the United Kingdom and Germany.

Prewar Exports of Agar-Agar, and their Destinations (1936)

Destination	Quantity lbs.	Percentage %
Asia	1,341,930	34.4
China	113,888	2.9
Hongkong	71,825	1.8
Kwangtung Province	115,740	3.0
French Indochina	97,222	2.5
Philippines	61,640	1.6
Neth. East Indies	330,820	8.5
Straits Settlement	221,428	5.7
Siam	78,439	2.0
British India ..	73,280	1.9
Australia	103,571	2.6
Others	74,077	1.9
Europe	1,717,460	44.0
United Kingdom	536,640	13.8
Germany	340,079	8.7
France	541,402	13.9

THE JAPANESE FISHING INDUSTRY

The progress achieved in the rehabilitation of the Japanese fishing industry is indicated by the great increase in fishing vessels. The largest construction of steel and wooden vessels was achieved in 1946 and 1947, about the end of which period the total number of fishing vessels reached that of the pre-war level. However, after 1949, new ships were constructed only so far as was necessary to replace old and out-worn vessels. From these facts, it can be concluded that the Japanese fishing fleet has reached the economic limit under prevailing conditions, though the present number of these vessels is not adequate for the sea area available. Another factor is that the prices of fish have recently fallen. The general outlook seems brighter if we consider the increase

of demand, both at home and abroad, owing to the outbreak of strife in Korea, and the hopes that are entertained for an expansion of the fishing areas permitted to Japanese fishermen.

Fishery and marine products have made a remarkable comeback since the end of the war. From a low 440 million kan (kan=3.75 kg.) in 1945, the total output increased to 640 million kan in 1949, exceeding the level of 610 million kan in 1944 which was the largest output in the world. The first four months of 1950 also show promising figures, namely fish and shells, 202 million kan compared with 188 million kan for the same period of last year, seaweeds, compared with 3 million kan as against 1 million kan. A breakdown of the

Destination	Quantity lbs.	Percentage %
Sweden	68,253	
Netherlands ..	65,097	1.6
Italy	15,079	0.4
Others	150,928	3.6
South Africa ...	26,587	0.7
Union of South Africa	24,603	0.6
Others	1,984	—
North America ..	695,634	17.8
United States ..	651,851	18.7
Canada	32,142	0.8
Others	11,641	0.3
South America ..	118,650	3.0
Brazil	18,253	0.5
Argentina	93,121	2.4
Others	7,276	0.2
Total	3,900,264	100.0

With the post-war resumption of export, a rapid recovery has been made, with 97,684 lbs. in 1945, 186,508 lbs. in 1946, 987,964 lbs. in 1947 and 885,128 lbs. in 1948. In 1949, however, the aggregate of exports up to the end of December was less than 80 percent of the previous year, of which 40 percent was the export made after the removal of the floor price. The overseas demand generally reaches its peak between March and April in connection with the time of production and the time of consumption, and after that declines gradually to the lowest in November and December before the beginning of new production, but the development last year was very different from the usual trend, and of the actual export up to the end of October, the contract for new product amounted only to 81,000 lbs.

This slump in export was of course due to the unfavorable conditions in the export as a whole, such as the reinforced control of export and import, the dollar shortage of purchasing countries, the establishment of the single rate of exchange, the rumours of yen devaluation following that of the sterling, etc., but in addition to these factors, circumstances relevant to agar-agar exclusively were the downward adjustment of floor-prices made several

times since 1948 and this uncertainty as to its price seems to have been the major cause that deterred sales abroad. When the floor price was removed on October 25, 1949, the price declined to as low as about half of the price prevalent till then.

Artificial Agar-Agar

This agar-agar is manufactured by means of machines. Though the study of it had been started already before the war, it was only a few years ago that it was put to practice by plants on a small scale, and there are only a few firms that are really operating.

There are two kinds of scientific agar-agar manufacture; one is the natural method partially mechanized, and the other is that which makes extracting and drying of agar-agar element different from the old method. The former makes indirect heating by steam instead of direct heating, and in straining uses a filter press and a centrifugal separator, employing a mechanical desiccating apparatus or a centrifugal separator and other preparatory dehydrating equipment concurrently instead of drying by the sun. The latter is little different from the former as to extracting and purifying, but in drying it utilizes drying by fire heat or by high frequency, instead of the freezing-drying process.

The scientific method is independent of time and place, and its product is mostly superior to that of the older method in respect to purity, solidity, insolubility, etc., but as it requires a high technique and elaborate equipment, the cost becomes high. Moreover, the removal of the floor price and the subsequent drastic cut in export price have put it in a difficult position, but there is still considerable room for rationalization.

With a producing capacity of 3,900 kan (32,500 lbs.) per month, the actual production of the last three years are 140 kan in 1947, 8,977 kan in 1948, and 4,616 kan in 1949 (Jan.—June), the exports amounting to 23,000 lbs.

figures show that except for Hokkaido herrings (29 million kan, a decrease from 40 million kan compared with last year), all the other items have increased: sardine, 37 million kan from 21 million kan last year, mackerel, 17 million kan as against 15 million kan, seabream, 2 million kan as against 1.4 million kan, bonito, 1.7 million kan as against 0.9 million kan, the fishing boundary of which was enlarged last September, tuna, 3.4 million kan as against 3 million kan, etc.

The production of whale oil for 1949-1950 has also increased to 29,658 tons as against last year's 20,350 tons. This quick recovery of output places Japan the third largest producer, the first and second being Norway and Great Britain.

For catching bonito and tuna, Japanese vessels have been permitted to go as far as the Equator since May 12, 1950, and two fishing fleets sailed on June 7 and July 10. The whale catcher fleet was permitted to sail to the Antarctic Ocean for 1950-1951.

With the favourable catch, deliveries are increasing, the arrivals in Tokyo being 19,629 tons in March (13,084 tons in May last year) and 25,655 tons in April (17,642 tons in April last year).

Although the total catch has increased, the fishing industry has reflected the current economic situation and fish prices have been on the downward trend, especially since the government controls on marine products were abolished on April 1st. The fall of fish prices has been greater than other commodities and materials. The peculiar situation is that it may be called a "famine in plenty".

The present condition of the fishing industry may be seen from the trawling business. The total number of steam trawlers before the war (1939) was 82, and in 1945 only 8 vessels remained. By 1949 there were 58 vessels. The catch was 9,710,000 kan before the war, 1,050,000 kan in 1945 and 8,460,000 kan in 1949. The permitted number of bull trawlers before the war (1940) was 603, in 1945 151 and in 1949 it reached 969 vessels. The catch was 41,190,000 kan before the war, 1,710,000 kan in 1945 and 54,490,000 kan in 1949. As a whole, the total is greater than before the war, although the fishing area has been limited to one third of the pre-war size (70,000 square sea miles) and its value as fishing grounds is only 15 per cent.

Because of two factors i.e. decrease of fishing area and unbalanced number of vessels, and also owing to unlawful fishing in Japanese boundaries since the spring of 1947 and to the present economic slump, the number of vessels has had to be limited in order to maintain the business.

The government passed a Law to conserve marine resources, (May 10 1950) and "to establish a maximum amount of fishing in long run". According to which the number of permitted fishing vessels will be limited and cancellation of approval may be made for vessels when the limited number is exceeded. The limited number for the Western Area is trawlers 45 and bull trawlers 650. Under the first reorganization of July 10, licenses for 1 trawler and 62 bull trawlers were cancelled. Also the fishing area for bull trawlers below 50 tons has been limited to the west of Long. 25 N. For existing vessels over the limited number, licenses will gradually be revoked before December 31. The above stated area is at present practically unusable owing to the outbreak of Korean war.

The number of associations established under the Fishing Industry Co-operative Association Law (enforced Feb. 15, 1949) as of the end of May was 4,281, with a total membership of 738,735 persons. Paid up capital is 1,140 million yen, and assets transferred to these associations from the former Fisheries Industry Organizations are estimated at 2,204 million yen. The economic basis of these associations is still unstable, and under the present circumstances financial assistance is needed. A firmer relation between each association and the establishment of a federation has been recommended. A committee meeting for bringing together Fisheries Industry Associations and plans were made to cultivate and to strengthen the existing association. At the same time, the following resolutions were passed: (1) To build up independent co-operative associations; (2) to increase capital and savings, each association should have a capital of at least 37 billion yen, the aim of this year's savings being fixed at 2 billion yen (at present, 1.5 billion). Cargo booking funds of about 1,550 million yen are urgently required as a countermeasure to prevent the expenditure on commissions. On the other hand, the Fishing Industry Law, promulgated on Dec. 15, 1949 and enforced March 14, 1950, has the following object: "To establish a basic policy for the fishing industry and regulate supply; to base the industry on individual enterprise to include those closely related to the industry; to utilize most efficiently the fishing areas thus developing the capacity, and democratize the industry."

According to the Law, the present fishing rights will become void in two years time and the present relationship regarding fishing area will be regulated. After that new licenses will be issued. The Central Fishing Industry Adjustment Council which meets for important discussions in connection with the law, has already held its first meeting and the election of the mem-

bers of the Sea Area Fishing Industry Adjustment Committee was held on August 15.

The total marine products exported during 1949 was valued at US \$10,990,000, frozen marine products (of which tuna amounted to \$1,270,000), liver oil (\$3,630,000), pearls (\$1,660,000) etc. being the major items. Regarding canned marine products, the total was \$6,108,000 (crab meat, \$1,350,000 and tuna \$1,320,000 etc.) The actual amount exported this year (Jan.-May) has been favourable, although the unit price was much lower than last year. Already \$10,622,000 or 48.5 per cent of this year's export plan has been realized.

By commodities canned goods increased to \$4,442,564. Especially, tuna in oil has met with good demand in the U.S. and 400,000 cases have been shipped which is higher than the 390,000 cases of 1935. Prices have dropped remarkably for oils and fats and agar-agar, the current price being about half of what it was during the autumn of 1949, but already the export amount has surpassed the export plan. Of frozen fish and shells, \$1,239,240 has been exported and albacore has also exceeded the amount planned for this year. As to the destinations of these products, 77 per cent of the total went to the U.S.A. as against 16 per cent in pre-war days.

The future demands, both domestic and overseas, for marine products, especially of frozen and canned bonito and tuna, will depend on developments in neighboring Korea, and an increasing catch in the enlarged areas.

Japanese Textile Production

(Unit: Yarn 1,000 lbs. Cloth 1,000 sq. yds.)

Pure cotton yarn	46,845
Cotton waste yarn	800
Cotton mixed yarn	157
Cotton cloth	
Independent weavers	62,325
Spinner weavers	67,614
Other weavers	138
Number of spindles	
Installed	4,014,854
Operable	4,005,748
(Month-end	8,806,701
Operating (
(Average	8,851,861
Number of looms	
Installed	
(Independent weavers	176,669
(Spinner weavers	50,508
(Total	227,177
(Independent weavers	
(Spinner weavers	50,388
(Total	225,442
(Independent weavers	
(Spinner weavers	114,284
(Total	46,832
Operating (
(Spinner weavers	161,116
Number of operatives	
(Spinning mill	68,928
Working (Independent weavers	
(Spinner weavers	81,872
(Spinner weavers	31,634
Filament rayon yarn	9,171
Rayon staple	14,060
Spun rayon yarn	8,534
Spun rayon cloth	19,706
Filament rayon cloth	88,665
Filament silk cloth	9,185
Spun silk cloth	1,295
Silk mixture cloth	2,105

INDIAN INDUSTRIES

Plastics Industry

Few materials used or made by man have aroused so much interest and speculation regarding their future uses as the synthetically produced or naturally occurring resinous substances, capable of being shaped into any form by the application of heat or pres-

sure, now familiarly known as "plastics". So rapid has been the development in this industry that within two decades, plastic products have become the basic materials for industrial and constructional purposes. Apart from the wide range of uses, the plastics industry will help a great deal in the establishment of a fully

developed chemical industry in the country, as it offers a wide scope for the utilisation of various products of the chemical industry whose development is vital to national security. Great importance is therefore being attached to the development of the plastic industry in India as it forms an essential part of the general industrial programme. The industry has, therefore, been recently granted protection for a period of three years.

TOURIST ATTRACTIONS OF INDOCHINA

The Associated States of Indochina include three different countries: Cambodia, Laos and Viet-nam. Bordering in the north on China, in the northwest touching Burma and adjoining Thailand in the west and southwest, these countries are peopled by races of widely differing appearance, language and culture.

Southern Indochina described here includes all of the Kingdom of Cambodia and South and Central Viet-Nam. The climate of this entire area is almost equatorial, varying between 68 to 94 degrees F. The only seasonal change is transition from moderately rainy weather from June to September to dry weather predominating from January to March, the best months of the year.

Northward towards Thailand with its shores lapped by the waters of the Gulf of Siam lies legendary Cambodia, Khmer Kingdom of bygone days. Cambodia is what remains today of the Great Kingdom of "Founan", founded by people from India in the early years of the Christian Era and conquered in the 6th century by Khmer Kings. Khmers attained the peak of their glory and splendour between the 9th and 13th centuries, leaving to posterity a wealth of gigantic temples and palaces in the city of ANGKOR. The Khmers today have preserved through ages of strife the simple rites of orthodox Buddhism and a distinctive way of living.

With French assistance, Cambodia regained national integrity in 1885. Latex, spices, maize and rice which the land of the Khmers yields in abundance provide the people with their livelihood. The Great Lake, Tonlesap, supports a thriving fishing industry. Big and small game abounding in the jungle and bush support the trapper and hunter and provide endless thrills to visiting sportsmen.

Annamites, closely resembling the Chinese in racial features, culture and customs, populate most of South and Central Viet-Nam. Primitive highlanders called Moïs inhabit the northern mountains, dwelling in tribes. The "Rhade" and "Giarai" are the most numerous and best known. Buddhism with rites and scriptures similar to those followed in China is the main religion of Annamites. The Moïs in their remote mountain abodes follow primitive idolatrous practices.

Viet-Nam is well endowed with noteworthy religious temples some an-

cient, others modern. An ever-captivating sight is presented by cities teeming with trade and by the fabulously fertile countryside, checkered into fields and plantations dotted with colourful dwellings inhabited by even more colourfully-garbed folk.

DALAT is the popular mountain resort of Southern Viet-Nam. Hidden away in the remoteness of the Annamese Mountain Chain in the midst of the Langbian Peaks, 5300 feet above sea level, it is entirely European in appearance —, a replica of fashionable resorts of France and Switzerland.

Dalat's temperate climate, its magnificent flora reminiscent of the temperate zone, and its perpetually cool summer attract yearly numerous holiday-makers from the cities of Indochina and the neighbouring countries. The most popular holiday season is from March to May, the warmest months in the lowlands below. Dalat's, however, pleasant all the year around and especially from mid-November to mid-June when sunny weather prevails.

Numerous mountain lakes, surrounded by pine forests and torrents forming roaring waterfalls, offer a variety of short and long excursions for both the motorist and horseback rider. The falls of "Pourgour" often referred to as the "Niagara of East Asia" and the smaller falls of "Cuga", "Lien-Khang" and "Ankroet" foaming in the wilderness of deep mountain gorges are captivating sights. Within walking distance from the town are the falls of "Canly" and the mountain gorges of "Da-Tria". Villages of primitive Moï highlanders are also within easy reach.

The hotels of Dalat rank among the best of the Far East. Lang Bieng Palace, Hotel du Lac, Hotel du Parc, Hotellerie Savoisienne and a number of smaller establishments, all expertly managed, offer every comfort and good French cuisine.

While the Office of Tourism for all Indochina has been dissolved as a result of the governmental reorganization now in progress and more urgent matters have thus far prevented the three countries from organizing new separate ones, airlines and travel agencies in Saigon are still active in promoting travel to the various points of interest in Indochina. Regular excursions are available to Phom-Penh, Angkor and Dalat from Saigon and also from neighbouring Bangkok, through the facilities of several travel agencies.

Manufacture of Plastic Goods

The plastics industry of India is in the very initial stage of formation. The industry has two broad divisions; (i) manufacturing of plastic goods by compression and injection moulding extrusion and laminating methods, castings and calendering coating and machine fabrication, (ii) manufacture of synthetic resins or plastic materials and moulding powders.

The plastic moulding industry has been largely developed during the last world war. Before the war, there were about a dozen moulding concerns manufacturing celluloid and other articles out of imported moulding powder, and semi-fabricated plastic goods. Considerable progress has been made in recent years and there are now about 60 firms engaged in this branch of the industry. Private capital invested is estimated at about Rs. 30 million. Articles made comprise the following: electric lighting and fitting accessories (e.g. sockets, switches, holders etc.), radio parts, appliances for the spinning and weaving industry, buttons and bottle caps, umbrella handles, cutlery and tooth-brush handles, table ware, toilet articles etc. etc.

Raw Materials for Plastic Goods

The raw materials required for the production of plasticware may be divided into the following groups:—

(i) Thermo-setting plastics, such as phenol-formaldehyde moulding powder (bakelite), urea-formaldehyde moulding powder;

(ii) Thermo-plastics, such as polystyrene, cellulose acetate, polyvinyl chloride, casein.

(iii) Sheets, tubes and rods made of cellulose acetate, cellulose nitrate (cellulod).

Phenol-formaldehyde is the only moulding powder at present manufactured in the country. When the Government Fertilizer Factory at Sindel (Bihar) comes into production in 1950-51, it is expected that about 3,000 tons of urea would be produced part of which could be used for the manufacture of urea-formaldehyde moulding powder. Casein is manufactured in India on a small scale, but it is of the lactic and not the rennet variety required for the plastics industry. So far as cellulose acetate is concerned, when the acetate rayon

plant at Hyderabad is installed, it may be possible to get cellulose acetate from the factory for the plastics industry. The production of celluloid or cellulose nitrate has also been undertaken on an experimental scale at the Government Cordite Factory at Aruvankadu. A few machines for the production of tubes or rods have been installed in two or three factories, but the production has not yet reached a commercial scale. Apart from phenol-formaldehyde moulding powder, the other raw materials comprise urea-formaldehyde moulding powder, polystyrene, cellulose acetate, cellulose nitrate, acrylic (methacrylate), and casein, polyvinyl chloride, and other resins. These are not at present produced in the country. It will thus be seen that, except phenol-formaldehyde moulding powder, all other powders and resins as well as semifabricated articles are imported at present.

In addition to moulding powders the manufacture of moulds is the most important item in manufacture of plastic goods. Moulds are not at present manufactured in India on any appreciable scale.

Many of the plastic articles are formed by pressing powder in a suitable mould and subjecting to heat and pressure (compression moulding). Some plastics are heated till they flow and forced into a cooled mould (injection moulding). Most of the firms employ compression and injection moulding. Some manufacturers of utility and domestic articles make their articles by machining, blowing, pressing plastic material in sheet rod and tube forms.

Consumption and Production of Plastic Goods

The consumption of plastic goods in India before the last war was estimated to be 500 tons. According to the All-India Plastic Manufacturers' Association, the consumption of plasticware has now gone up to 4,000 tons, of which about 3,000 tons are at present manufactured in India and the balance imported. The Tariff Board however estimate that the total demand for the Indian Union can be put at 4,000 tons of plastic goods per annum during the next three or four years. Of this quantum of demand, nearly 75 per cent may be estimated for domestic and utility articles and about 25 per cent for industrial articles, including electrical accessories.

There are no accurate estimates of the rated capacity as well as the actual production of plasticware in the country. According to an official estimate, the present rated capacity

of the plastic industry is put at 4,000 tons a year, details of which are as follows:

Type	Number	Total Consuming Capacity of Raw Materials
Compression ..	210	2,000 tons
Injection	72	
Extrusion	11	1,500 "
Fabrication ...	—	500 "
		4,000 "

It was officially estimated that the actual production in 1948 was 1,100 tons. The Tariff Board hold that the rated capacity of the Indian moulding factories can be put at 4,000 tons of finished plasticware per annum and that the actual production in 1948 was about 1,500 tons. As regards imports of plastic the total value of imports of plastic of all kinds, including moulding powders, during 1948-49 was estimated at Rs. 3.56 million out of which imports of plasticware alone accounted for Rs. 1.507 million.

Plastic Manufacture

Moulding powder is the backbone of plastic moulding. The production of synthetic resins of plastic and moulding powder is a more important branch of the plastic industry. The non-availability of chemical raw materials in India is a big handicap for development in this line. Only the manufacture of phenol-formaldehyde moulding powder is now successfully carried on a small scale by the industry. The annual consumption of phenol-formaldehyde moulding powder in India has been estimated by the Tariff Board at 1,000 tons in 1950, 1,500 tons in 1951 and 2,000 tons in 1952. Production in 1948 was about 150 tons. The powder is made from imported chemicals, phenol and formaldehyde. The capacity of production for this type of powder is estimated at 600 tons annually. In the pre-war period, according to an estimate of the Panel on Plastics and celluloid industries imports of moulding powders stood at 600 tons. Imports of phenol-formaldehyde moulding powder during 1947 were estimated at 200 tons and during 1948, 1000 tons. The total imports of plastics during 1948-49 amounted in value to Rs. 3.565 million, out of which moulding powders accounted for Rs. 2.058 million. The principal sources of import at present are the United Kingdom and the U.S.A.

Glass Industry

The indigenous glass industry cannot be called a nascent industry, although certain branches of the industry are still in an early stage of development. The first Indian (Ceylon) references to glass are in the Mahavamsa, the chronicles of the Sinhalese kings (B.C. 306), when glass mirrors were carried in processions. Crude glassware and ornaments of

glass of about the early Christian era have been found in various parts of India. The art of glass-making has thus been known in India for ages and at least in one branch, viz., bangle-making it has been practised for several generations by the Shishgars of Firozabad, one of the artisan classes of the country. Bangle-making has considerably expanded during the last war mainly on account of the cessation of imports from Japan and Czechoslovakia.

Early History

The first attempt to manufacture glass and glass-ware on modern lines dates back to the year 1892 when a bottle-making factory was started at Jhelum by the Murree Brewery with the help of a German expert. This factory, was, however, closed down on account of its high costs of production. The first glass factory under Indian management was started at Titagur under the name of Pioneer Glass Works with the help of an Austrian expert. This factory too had to close down after about 10 years due to lack of technicians. Several other attempts were also made after this failure. Some of the factories that were then established, struggled hard and managed to survive notably at Allahabad, Ambala, Bahjoi and Talegaon. Early failures were largely due to the lack of efficient organisation, and the lack of technical skill on the part of Indians and consequent dependence upon foreign experts.

The industry did not suffer because of any lack of raw materials in the country, as sand, lime and refractories were available in India. Although the position regarding refractories is still not very satisfactory, India has made considerable progress in the manufacture of refractories.

A large number of Japanese experts were employed in the early days of the glass industry and these experts were more successful than the European experts. The present day glass industry is modelled on the Japanese lines, probably owing to its earlier association with the Japanese experts. The first World War (1914-18) gave momentary impetus to the industry owing to the stoppage of imports from countries which were either allied to the enemy or occupied by him. Japan seized the opportunity to establish a very substantial market in India. New factories, however, were opened in India to meet the demands of the country and the number of factories increased from 3 in 1914 to 14 in 1918. Lamp-ware, bottles, jars and tumblers were produced during this period. The end of the war saw the tide turning again and with the revival of foreign competition, the industry began to languish. Nevertheless, by this time, the industry had taken a firm root in the Indian soil and had come to stay despite foreign competition.

and had made considerable strides during the interwar years, although at a much slower rate than before. In 1927, the Industry approached the Government of India for protection against competition from imported glass and glass-ware. In 1931, Government referred to the Tariff Board for investigating the claim of the industry for protection or assistance. Although the Board recommended protection to the industry, Government rejected the Board's recommendation on the ground that one of the main raw materials viz., soda ash was not available in the country.

Progress During World War II

The outbreak of World War II, which considerably reduced the imports of glass and glassware, gave a strong fillip to the industry and the industry developed on fairly systematic lines and articles of better quality were produced. Some factories installed automatic and semi-automatic machines for the manufacture of sheet glass, bottles etc. and also put up improved types of furnaces.

The number of factories increased from 80 to 174 and production from 6 million sq.ft of sheet glass and 43,000 tons of other glassware in 1939 to 13 million sq. ft and 110,000 tons, respectively in 1945. At present there are in the Indian Union 224 glass factories including 93 manufacturers of bangles and beads and false pearls. The industry embraces diverse types of manufacturing organization, varying from small workshops on a cottage industry basis to large-scale units controlled by proprietary and managing agency systems.

The majority of the glass factories, other than those engaged in the manufacture of bangles, produce either containers or lampware or both. There are at present about 20 to 30 factories manufacturing tableware in addition to containers. Three factories produce sheet glass, while about 9 factories produce scientific glassware.

Sheet Glass

An official estimate puts the domestic demand for sheet glass at 39 million sq. ft per annum while unofficial estimates vary from 25 to 31 million sq. ft per annum. In order to assess the domestic demand for sheet glass, the Tariff Board took into account the following factors: (i) the estimated consumption during 1938-39; (ii) the partition of the country; (iii) the pace of industrial development and increase in building operations. On this basis, they considered that for the next three years the consumption of sheet glass might be put at 32 million sq. ft per annum. This estimate includes the demand for different gauges of sheet glass.

There are at present three factories in the country which produce sheet glass. The rated capacity of

the three sheet glass units was officially estimated to be 20 million sq. ft. per annum which was the figure adopted by the Panel on the Glass Industry in 1945. On the other hand, an unofficial estimate puts the total capacity at 25 million sq. ft. The Board, however, estimated the rated capacity of the existing three units at 15 million sq. ft. Two additional units are likely to be established shortly and they would be in production in the course of the next two years. So far as actual production is concerned, the three units together produced about 6 million sq. ft. per annum during the pre-war period. A maximum production of 13 million sq. ft. was reached in 1944-45. Thereafter, production has been on the decline until it went down to 6.3 million sq. ft. in 1948 and 3.4 million sq. ft. in 1949. This steep fall is attributed to irregular and insufficient supplies of raw materials and competition from imported glass and a fall in prices, resulting in accumulation of stocks with the manufacturers.

As regards imports of sheet glass bulk of them has been from Belgium. During the period 1946-47 to 1948-49, imports worked out to an average of about Rs. 7.9 million per annum, which is more than three times the pre-war value of imports, although the productive capacity of the indigenous industry has increased to twice as much as it was before the war. During 1948-49, imports of sheet and plate glass amounted to about Rs. 10.1 million but they declined to 8.5 million in 1949-50.

Blown-Ware and Pressed-Ware

The Panel on the Glass Industry estimated the pre-war consumption of blownware and pressedware at 101,200 tons and fixed the target for future consumption for undivided India, during the period 1945-50, at 129,700 tons per annum. The three important categories of blownware and pressedware are (a) bottles and phials, (b) lampware, and (c) tableware and pressedware. As regards bottles and phials, the Panel estimated the pre-war consumption of bottles and phials at 80,000 tons and suggested a target of 100,000 tons per year during the period 1945-50. An official estimate, however, put the domestic demand at 80,000 tons per annum after making an allowance of 20 per cent on the Panel's target figure for estimated consumption by Pakistan. But according to the Tariff Board, the demand for bottles and phials would be 100,000 tons during 1950, 150,000 tons during 1951 and 200,000 tons during 1952. Regarding lampware the Panel fixed the target of consumption at 14,000 tons per annum for the period 1945-50. But the Tariff Board have estimated that the requirements of the country for lampware of all sizes would be at about 10,000 tons

per annum during the period 1950-52. Lastly coming to the future demand of tableware and pressedware, it is estimated at 10,000 tons per annum.

As regards production of blownware and pressedware the total annual capacity was estimated by the Panel on the Glass Industry to be above 117,000 tons. According to the Tariff Board, the total productive capacity of this section of the industry has been estimated at 148,000 tons in 1950, 173,000 tons in 1951 and 223,000 tons in 1952. Of this the bottles and phials constitute the major item with a capacity of 125,000 tons in 1950, rising to 200,000 tons in 1952 and the other items viz., bottles and phials, lampware, tableware and pressedware have an estimated capacity of 23,000 tons. Regarding actual production, the industry produced 110,000 tons during 1945, 70,000 tons in 1948 and 69,000 tons in 1949, nearly 60 per cent of which constituted bottleware. While the imports of bottles and phials and lampware have fallen considerably during the post-war period, there was a marked rise in the imports of tableware and other glassware and they amounted to Rs. 20 million in 1947-48. During 1948-49, however, there was a sharp decline and imports stood at Rs. 4.6 million only. In 1949-50, they rose to Rs. 7.2 million.

Bangles

There are three main types of bangles, namely, Reshmi, Hollow and Fancy, which are manufactured in the country. Besides these three, there are other types which are produced exclusively on a cottage industry basis. The Panel on Glass Industry estimated India's pre-war consumption of bangles at 15,000 tons per annum and expected that consumption during the course of the next five years would increase to 19,800 tons per annum. The Tariff Board have estimated the demand for glass bangles during the next three years at 12,000 tons per annum. The rated capacity of the industry is stated to be much in excess of the home demand. There are at present 86 medium-sized factories which come under the purview of the Factory Act, in Firozabad, U.P., besides several hundreds of workshops on a cottage industry basis in U.P., in Madras and in Poona. The total productive capacity of these units is estimated at 35,000 tons per annum. In regard to actual production, it has been steadily declining owing to shortage of raw materials, transport difficulties and the grouping of the 86 factories into 29 units as a means of rationalisation for the purpose of supply of raw materials, which was brought about in the first half of 1948. The production of these 86 factories and small workshops in 1949 has been estimated at about 17,000 tons. Before the war imports of bangles amounted to an average of Rs. 2.4 million per

annum, while during the post-war period they averaged Rs. 200,000 per annum, which was negligible when compared to the annual production worth nearly Rs. 35 million. Since 1947-48, imports have dwindled to such an extent that the following year they amounted to Rs. 544 only. There has thus been no appreciable foreign competition in the case of bangles during the post-war years.

Soda Ash Industry

Although the soda ash industry is mainly a wartime development, it may be mentioned that extensive deposits of sodium carbonate occurring in widely separated parts of the country were exploited during the first world war, and pure sodium carbonate was extracted both in the United Provinces and in Mysore. Deposits of sodium carbonate also occur in the basins of certain lakes in Berar and in Rajputana; similar deposits have been found in certain parts of the country which now form part of Pakistan. When prices fell after the first world war, the methods of extraction employed proved uneconomical. A more promising source of supply was provided by the Shri Shakti Alkali Works established in 1923 by the Dhrangadhra State where soda ash has been manufactured from the abundant supplies of salt in the brine wells of the desert of Cutch, by what is known as the ammonia-soda process. The Works operated on a more or less experimental basis during the first few years but certain difficulties compelled the Works to suspend operations early in 1931. The factory resumed operation in 1940 after introducing large-scale changes in the plant which was designed to produce about 18,000 tons of soda ash per annum. The Tata Chemicals planned the establishment of a large plant in 1939 at Mithapur, with the object of producing various chemicals from salt, such as marine chemicals, electrolytic caustic soda and chlorine, products from chlorine like hydrochloric acid and bleaching powder, as well as soda ash, sodium bicarbonate and caustic soda by the causticisation process. Of these soda ash was to be the principal item of production. The soda ash plant at Mithapur was started in 1944 with a capacity of 50 tons a day. The two indigenous factories were in production till April 1949 when they were forced to close down on account of their inability to dispose of their stocks due to heavy imports of soda ash. Imports of soda ash were later banned during July and December 1949 and the production was, therefore, resumed from October 1949 onwards. The industry was recently granted protection for a period of three years i.e., up to 31st March 1953.

As regards the present demand for soda ash in the country an official estimate puts it at 120,000 tons a year. The Panel on the Heavy Chemicals and Electro-Chemical Industries, estimated the consumption of soda ash by different industries in the country in 1944 to be 107,500 tons. The Panel had also envisaged that the consumption of soda ash would be of the order of 270,000 tons by 1949. The Tariff Board, however, have estimated the annual demand for soda ash in the next two or three year at 90,000 tons, of which 50,000 tons will be for heavy ash and 40,000 tons for light ash.

The total installed capacity of the soda ash industry in the country, is estimated at about 46,800 tons per annum. Regular production of soda ash in the country was commenced only since 1940, with the result that a large proportion of the demand had to be met by imports. The following statement shows the production of soda ash in recent years:—

Year (July to June)	Tons
1940-41	11,614
1941-42	15,520
1942-43	17,442
1943-44	15,442
1944-45	12,062
1945-46	14,790
1946-47	8,171
1947-48	21,689
1948-49	28,499
1949-50	30,057

It will be seen from the above statement that the actual production has been much below the rated capacity. As already stated, because of the heavy imports during 1948-49 with the consequent rapid fall in prices and accumulation of stocks, the indigenous factories were compelled to shut down in April, 1949. The import of soda ash during July and December 1949 was banned and the local producers were able to dispose of much of their accumulated stocks. Production was, therefore, resumed from October 1949 and there has been a marked rise in production during 1949-50.

Since regular production of soda ash in the country was undertaken only from 1940, the entire demand before that year was met by imports and, even after 1940, an appreciable portion of the demand has also been met by imports. The chief sources of import are the United Kingdom, Magadi in East Africa, the United States of America, Italy, France, and Japan. Before the war, imports of soda ash were of the order of 65,000 tons a year. During the war, imports were restricted owing to a general shortage in the exporting countries and inadequate shipping facilities. At the end of the war, the demand for soda ash increased, and imports were allowed more freely; and since the ruling price of indigenous soda

ash was considerably higher than that of the imported soda ash, there were excessive imports far beyond the requirements of the country. For instance, imports in the last pre-war year were 81,000 tons; in 1947-48, they came to 67,940 tons valued at Rs. 13,274,958 and rose to the abnormally high figure of 163,567 tons in 1948-49 valued at Rs. 53,520,311. In 1949-50 however, there was a sharp decline as a result of Government restrictions on soda ash imports and imports of soda ash amounted to only 12,295 tons valued at Rs. 2,811,586.

Fountain Pen Ink Industry

The first factory established in India to produce fountain pen ink on a commercial scale was set up in Madras in 1920. Between 1920 and 1930, a few more units were established in the State of Madras and elsewhere. During the period from 1930 to 1940, ten more units were established in different parts of the country. Thus, before World War II, there were more than a dozen indigenous factories producing fountain pen ink. It was, however, the advent of World War II that gave a stimulus to this industry to develop rapidly. This was mainly due to the disorganization of world trade and lack of shipping facilities, resulting in the reduction of imports of fountain pen ink. During this period, the indigenous producers also exported the article to the neighbouring Eastern countries. It will be thus seen that the main expansion of this industry took place during war-time and the immediate post-war period. This industry may, therefore, be regarded as a war-time industry. However, during the early post-war period, the production of indigenous fountain pen ink was considerably curtailed due to the keen competition offered by large quantities of the imported material which was being sold at comparatively low rates. But, as a result of the total banning of imports of fountain pen ink in July, 1949, the position of the industry has improved since then.

The number of known units at present is about seventy-seven, and they are distributed all over the country, but South India and the States of Bengal and Bombay claim the largest numbers. The industry is mainly composed of small units. The amount of capital employed in the different units ranges from Rs. 250 to Rs. 200,000; in the majority of cases, however, the amount invested is below Rs. 20,000. The annual demand for fountain pen ink in the country has been estimated by the Tariff Board at about 1,200,000 gross bottles of 2 oz. size. Having regard to the schemes for progressive expansion of compulsory primary education and to adult literacy campaigns, there was scope for the indigenous demand to increase.

As regards domestic production the Tariff Board stated in their report that while the combined rated capacity of the 23 units which furnished details of their production in terms of dozen bottles of 2 oz. size is 1,586,541 per annum, the combined actual production of these units was only 80,738 in 1946, 191,526 in 1947, 181,776 in 1948 and 114,699 and 1949. Thus even in the year of highest production, namely, 1947, actual production was only about 12 per cent. of the rated capacity. The reason for the Manufacturers inability to utilize as large as 88 per cent. of their rated capacity was that the demand in the country was not sufficient to call for the full utilization of the rated capacity. The process of manufacture in this industry being simple, production could be increased to any extent required provided the raw materials could be obtained in sufficient quantities and there was the necessary demand. Further the figures of rated capacity and actual production given above relate to only 23 out of 77 units existing in the country. It is therefore not impossible that the industry will be able to meet a substantial portion of the domestic demand.

Sago Industry

Prior to the last World War, sago globules used to be imported into India in large quantities from Penang and Singapore. Subsequently, however, when these areas fell into the hands of the Japanese, supplies of sago globules from these sources were cut off. It was under these circumstances that the manufacture of tapioca globules was started in 1943 in the Salem District of Madras. Taking advantage of the scarcity of sago globules in the country, about 100 factories were started on cottage basis, of which about 20 employed motive power and 80 worked entirely with manual labour. Some of the rice mills which had closed down owing to the paucity of paddy also switched over to the manufacture of tapioca globules. The imposition of a ban by the Government of Madras in 1946 on the movement of tapioca and its products from the Madras State, due to shortage of food grains in the State, had an adverse effect on the growth of the industry. The ban was, however, lifted in August, 1948. The industry also received a severe set-back when sago was put on O.G.L. XI from July, 1948 to May, 1949. During this period, a number of small units had to close down owing to foreign competition, while others had to curtail their production. At present, there are over 40 units engaged in the production of tapioca globules.

Tapioca root is the only raw material required for the manufacture of tapioca globules. It is largely grown in the United States of Travancore and Cochin and, to a lesser extent, in

the Salem, North Arcot, Tanjore and Tiruchirapalli districts of the Madras State and in certain parts of Malabar. The total acreage under tapioca cultivation in Travancore and Cochin is estimated at 500,000 acres, while the area in the rest of South India was 40-50,000 acres. The yield per acre is estimated at 5 tons in Travancore and Cochin while in other parts of South India it is much less. In the United States of Travancore and Cochin, however, tapioca root is used as a supplementary food by the poorer classes. Tapioca root is also one of the substitute raw materials for the production of starch. The starch industry has already been established in the country. With the development of tapioca globules, starch and other subsidiary industries the demand for tapioca root is bound to increase. Moreover, in view of the prevailing food shortage in the country, it is necessary to increase the food resources and an increase in the output of tapioca root is desirable for that reason also. The present yield of five tons of tapioca root per acre attained in Travancore is not satisfactory when compared with the output of 10 to 15 tons per acre in Java, Malaya and the Philippines, where intensive cultivation on a plantation scale has been in progress for a number of years. The Tariff Board are of the opinion that with suitable research and assistance, it should not be difficult to improve the yield of tapioca root and also to bring new land under tapioca cultivation.

As regards domestic demand for sago globules, an official estimate puts it at 5,000 tons per annum. The Tariff Board, however, have estimated that the annual domestic demand for sago should be about 7,000 tons for the next three years.

There are at present over forty factories engaged in the production of sago globules with an aggregate rated capacity of 19,500 tons per annum. Owing to the lack of adequate supplies of tapioca roots caused by delayed rains, only 20 factories were reported to be in production in 1949. The present production is estimated at about 6,000 tons per annum.

INDIA'S EXPORTS

LIST OF PRINCIPAL ARTICLES EXPORTED FROM INDIA

TEXTILES AND FIBRES

Cotton textiles, including—
Coloured, printed or dyed piecegoods.
Grey piece goods.
Hand-woven piecegoods.
Handkerchiefs and shawls.
Haberdashery and millinery-made-up goods,
e.g., quilts, bed-covers, counter-panes, etc.
Curtain cloth.
Hosiery, shoe laces, tapes, lantern wicks.
Canvas shoes.
Fishing nets.
Tents.
Sewing thread.

Yarn.
Cotton waste.
Kapok.
Zari goods.
Silk textiles, including artsilk goods.
Cotton and silk embroidery.
Gold and silver embroidered goods.
Filigree works of other kinds.
Woolen textiles, including—
Woolen piecegoods.
Carpets and rugs.
Shawls.
Raw wool.

Hemp manufactures.
Jute manufactures.
Coir mats and other manufactures.
Cordage and rope.
Bristles.
Fibres for brushes and brooms.

LEATHER MANUFACTURES

Boots and shoes.
Other leather goods.

RUBBER MANUFACTURES

Tyres, tubes.
Rubber belting.
Other rubber goods.

IRON AND STEEL MANUFACTURES

Hurricane Lanterns.
Cutlery.
Enamelware.
Cast iron pipes, and other casings.
Builders' hardware.
Galvanized iron locks, wire nails and buckets, small tools.
Cast iron weights, measures, moulds & pulleys.
Weighing machines.

ELECTRICAL GOODS

Ceiling fans and accessories.
Electrical insulating material.
Electrical wire and cables.
Instruments, apparatus and appliances, including—

Accumulators and dry cells, electrical lamps.

GLASSWARE AND PORCELAIN.

FURNITURE (WOODEN).

PAPER AND STATIONERY.

MATCHES.

SOAP, TOILET AND WASHING.

OILS, OILSEEDS AND FATS

Castoreed and oil.
Linsed and oil.
Niger seed, kundi seed and oils thereof.
Hydrogenated oil.

ESSENTIAL OILSEEDS AND OILS

Coriander, cummin, etc.

SANDALWOOD AND SANDALWOOD OIL.

SPICES

Pepper.
Chillies.
Ginger.
Turmeric.
Cardamom.

PICKLES, CHUTNEYS, CONDIMENTS, CURRY POWDER, ETC.

TEA, BLACK AND GREEN.

COFFEE.

PARAFFIN WAX AND CANDLES.

PERFUMES.

CASHEW NUTS (KERNELS), AND OTHER DRY FRUITS.

TOBACCO

Tobacco leaf—virginia and other types.
Cigars and cigarettes.

HIDES AND SKINS

Cow hides, raw and tanned.
Buffalo hides, raw and tanned.
Sheepskins, tanned.
Goatskins, raw and tanned.
Reptile skins.

DYEING AND TANNING SUBSTANCES

Myrobalans and myrobalan extract.
Cutch and gambier.

METALS AND METALWARE

Iron ore.
Manganese ore.
Kyanite.
Brassware.

LAC

Shellac, button and stick.

MICA**CANES AND RATTANS.****SPORTS GOODS**

Tennis Rackets.
Badminton Rackets and shuttle-cocks.
Tennis Guts.
Cricket bats, balls and soft leather goods.
Hockey sticks and balls.
Nets for all sports.
Football, volley ball and basket ball cases and bladders.
Sports boots.
Toys and requisites for games.
Fishing tackle.

IVORY GOODS.**LACQUERED WARE AND PAPIER MACHE GOODS.****EARTHENWARE AND PORCELAIN WARE.****HANDICRAFTS AND FANCY GOODS INCLUDING LACE AND EMBROIDERED GOODS.****CRUSHED BONES AND BONE CRISTS.****BELTING FOR MACHINERY.****PAINTS AND VARNISHES.****WOOD AND TIMBER (CERTAIN VARIETIES ONLY).**

Articles of stationery and office equipment including—
Typewriting carbon paper and ribbons.
Ink stands, inks, pen holders, nibs, pencils, erasers.
Foot rules, drawing instruments, drawing boards, etc.
Fountain pens and fountain pen inks.
Pencil weights, table calendars, blotters, etc.
Office furniture—made of steel or wood.
Filing cabinets, trays, table pads, etc.
Flat files, record files and other articles of stationery.
Duplicators made in India.
Sensitized paper.

Toilet articles including—

Tooth pastes and tooth powders.
Tooth brushes.
Perfumes.
Hair oils.
Creams and snows.
Soaps.
Shampoos.

Shaving requisites including—

Shaving soaps and sticks.
Brushes.
Shaving bowls.
Razor blades.
Mirrors.

Miscellaneous articles including—

Safes.
Scientific and surgical instruments made in India.
Tents.
Vices.
Toys.
Electric torches and battery cells.
Cycle lamps and bells.
Tyres and tubes.
Insecticides.
Hospital furniture and equipment.
Aerated water machines.
Metal polish.
Electroplated ware and brassware including tea sets, etc.
Gases including oxygen, acetylene and carbon dioxide.
Gramophones.
Radios assembled or made in India.
Silicate of soda.

Motor car batteries.

Steel armchairs and furniture.

Glycerine.

Plastic goods including combs, children's toys, soap cases.

Buttons of mother of pearl and plastic, cuff links, etc.

Boot polish.

Umbrellas.

Ropes.

Cigarettes, cigars and smokers' requisites.

Articles of machinery including—

Farmers' pumps, Electrical motors below 30 P.H.

Printing machinery.

Ceiling fans, Table fans.

Machine tools made in India.

MISCELLANEOUS & COTTAGE INDUSTRIES

Indian brass artware.

Embroidery ware.

Galvanised iron linckets.

Merut scissors.

Aligarh locks.

Cutlery.

Surgical instruments.

Indian leather goods.

Glass bangles.

Carved ivory goods.

Brocade and brocade goods.

Straw and manufactures thereof.

Mysore Sandalwood products (soap, oil and perfumes).

Kashmir art goods.

Wood carvings.

Mysore handloom cloth.

Mysore Agarbati.

Leather footwear.

Wooden footwear.

Umbrellas.

Woollen carpets.

SARIES & DHOTIES

Patola saries (From Patan near Baroda).

Bandhi saries (From Jaipur & Jodhpur).

Butik saries (From Santiniketan).

Tissue Saries (From Benares).

Dacca type saries (From West Bengal).

Embroidered saries (From Kashmir).

Chanderi Sari Mercerised Cotton

(Woollen) (From Maheshwari).

Sambhalpuri Sari Borders and pullos Woven

in petala style (From Orissa).

Murshidabad silk prints saries (From West Bengal).

Jaipur printed saries on mill made mull (From Jaipur).

Santipur fine counts saries, dhoties and chaddars (From West Bengal).

Uppada fine counts, saries [From Andhra (Madras).]

Uppada silk (light) saries [From Andhra (Madras).]

Onidiputhur silk saries (From S. India).

Khudi printed and woven saries (Madras Govt. production centres) (From Avnashi).

COTTON

Shirtings and suitings (From Bikaner, Surat, Madras).

Quilt covers (From Jaipur & U.P.).

Printed cloth, for blouses etc. (From Jaipur, Madra and U.P.).

Dress materials (From Surat).

SILK**Shirting**

Pure silk (From Bengal, Orissa).

Art silk (From E. Punjab, Surat).

Shirtings

Pure silk (From Surat and Orissa).

Endi silk (From Assam).

Blouse pieces

Various woven and printed designs on art

silk (From Bombay, Surat).

Pure silk with gold and silver work (From Bombay, Benares, and Hyderabad).

Scarves

Silk (From Jodhpur).

Silk woven with gold and silver (From Benares).

Sari pallos

Cotton (From Hyderabad).

Silk Woven gold (From Uppada, Hyderabad and U.P.).

Sari Borders (From U.P. & Baroda (Patola).

Woollen

Coating (From Mandi and Himachal Pradesh, Bikaner).

Blankets (From East Punjab).

Brocades

Dress material (From Benares).

Table cover and bed spreads (From Benares).

Shoes & Purses (From Benares).

Himroo

Blouse (From Hyderabad).

Furnishing (From Hyderabad).

Achkan and Coats (From Hyderabad).

Bed covers

Printed (From U.P., Bombay & Jaipur).

Woven designs (From Orissa & Santiniketan).

Plain coloured (From Delhi, E. Punjab and Trivandrum and Hyderabad).

Curtains

Woven design (From Orissa, Santiniketan, Manipur & Assam).

Plain (From Hyderabad, U.P.).

Table Covers

Woven design (From Hyderabad, Bengal).

Printed (From Jaipur).

Plain (From Delhi, E. Punjab and U.P.).

Khes

Various designs (From East Punjab).

Ready Made Quilts

Cotton Carpet (From Himachal Pradesh, Bengal).

Cotton Asan (From Baroda & Trivandrum).

Luncheon set and tray sets (From Manipur, Bengal).

Pillow covers (From Delhi).

Ivory Carvings

Statuettes of various gods and goddesses

(From Bengal, Travancore, Jaipur, Delhi).

Small animals (Bengal, Jaipur, Delhi, etc.).

Table decorations such as figures, powder

boxes, cruet sets, flower vases, caskets, cig.

cases, paper cutters, serviette rings, etc.,

etc. (From Bengal, Delhi, Travancore, Jaipur and U.P.).

Necklace, eartops, bangles, brooches, Chess-

sets (From Delhi and Travancore).

Caskets and cig. boxes in ivory and tortoise

shell (From Madras and Visakhapatnam).

Wood Carvings

Animals, book ends, caskets, trays, cig.

boxes, brackets (From Madras, Trivan-

drum, E. Punjab, Bombay and Kashmir).

Sandal wood figures, small boxes, small

carved dishes, cig. cases, toysets (From

Mysore).

Lacquered articles

Bowl (From Baroda and Bombay).

Flower Vases etc. (From Travandrum).

Stone Carvings

Marble Hindu Gods and Goddesses (From

Jaipur).

Marble and Soap stone Powder boxes, trinket

boxes, Ashtrays, plates and lamps (From

U.P. (Agra).)

Brass

Flower vases, dhoop dani, angoor dans,

powder boxes, dinner gongs, cig. boxes and

ash trays (From U.P.).

Tea trays and pin trays (From U.P.).

Table lamps (From U.P.).

Surahi and flask (From U.P., Jodhpur).

Bidri

Flower vases (From Hyderabad).

Ash trays and cig. cases (From Hyderabad

and U.P.).

Powder boxes and small trinket boxes (From

Hyderabad).

Plates (From Hyderabad and U.P.).

Pandan, Hukka and Ugaldan (From Hydera-

bad).

Buttons and Brooches (From Hyderabad).

Silver Filigri

Trinket boxes and soap boxes (From Hy-

derabad).

Scent bottles, Plates, Pandan (From Hydera-

bad).

Ash tray and cig. cases (From Hyderabad).

Plain Silver

Tea set (From Kashmir).
 Glasses and plates (From Kashmir).
 Ice cream set (From U.P.).
 Powder boxes (From U.P.).
 Powder boxes (From U.P. & Kashmir).
 Cig. boxes and soap boxes and powder boxes (From U.P. and Kashmir).
 Tilak dani and surmedani (From Kashmir).
 Coffee spoons (From Hyderabad, Madras & Trivandrum).
 Silver and copper plates and trinket boxes with work (From Tanjore).

Bell Metal

Kuja (From Travancore and Cochin).
 Lamp (From Travancore & Cochin).
 Plates & Tumblers (From Travancore).
 Coffee filters (From Travancore).

Steel Goods

Knives (From Cutch & Bombay).
 Nut cutters (From Bombay).

Jewellery

Necklace, rings, ear-rings, and tips, brooches, etc., etc. (From Kashmir).

Ready Made Garments

Blouses Embroidered (From Delhi, Bombay and Cutch, U.P., Hyderabad).
 Blouses Batik (From Bengal).
 Cotton and silken frocks, Children's suits (From Delhi and U.P.).

Embroidered Goods

Table cloth cotton (From Delhi, Bombay, Punjab and Trivandrum).
 Silk (From Kashmir).
 Table mats & Luncheon sets and duches sets (From U.P. & E. Punjab).
 Gloster, Cushion covers and Pillow covers (From Cutch, Delhi & E. Punjab).
 Shawl and wrappers
 Woollen (From Kashmir).
 Lohies (From Uttar Pradesh).
 Silken (From Bengal & Assam).

Laces

Sari Laces, Luncheon sets, Pillow covers etc. (From Trivandrum & E. Punjab).

Towel & Hankies

Towels and Hankies, Honey comb (From U.P. & Bengal).

Hankies, Ladies and Gents (From Delhi, U.P., Bengal & Bombay).

Bags

Pouches embroidered and mirror work (From Delhi, Cutch and Bombay).
 Hanging bags (From Trivandrum, Delhi and Baroda).
 Hemp bags (From Bombay).
 Shopping bags (From Delhi).

Toys

Wooden (From Mysore, Trivandrum, Gwalior and Delhi).
 Skin (From Gwalior and Bombay).
 Cloth (From Bombay, Delhi, Baroda and East Punjab).
 Clay (From U.P. Santiniketan).
 Parrotie (From U.P.)
 Dolls (From Gwalior, Bengal & Bombay).
 Lace Bangles (From Gwalior).

Shoes

Chappals (From Delhi).
 Slippers (From Bengal).
 Desi jooti (From Jaipur & Jodhpur).

Incense

Agur batti (From Mysore).
 Dhooop powder (From Mysore).

Pine Goods

Blotters, file covers, fans, small purses, hanky cases, wall mats, dinner sets (From Trivandrum).

Lacquered

Dibbies, agar bati stand, decoration etc. (From Trivandrum).

Pottery

Plates decorative (From Bengal and Santiniketan).
 Plates for use (From East Punjab).
 Powder Boxes, Gallipots and Pinbowls (From Santiniketan).
 Ash trays (From Santiniketan and Vellore).
 Dhoopdani and wall brakes (From Vellore).
 Lamp stand (From Khurja & East Punjab).
 Flower Vases (From Mysore).
 Tea Pots (From Bengal & U.P.).

Leather Bags

Sand Bags (Batik embossed and embroidered) (From Bengal, Bombay and Baroda).
 Reptile skin (From Bengal and Madras).

Crocodile Wallets (From Madras & Bengal).

School bag (From Santiniketan).

Last Minute bags (From Bengal and U.P. (Agra).]

Leather cases

Suit cases (From Punjab and Bengal).
 Toilet cases (From Bengal and Bombay).
 File cases (From Bengal and Madras).
 Cigarette and cigar cases (From Bombay & Bengal).

Cushion covers

Book covers (From Bengal).
 Photo frames (From Bombay and Bengal).
 Doctor case (From U.P. and Cochin).

Mats

Floor mats (From Bengal and Cochin).
 Table mats (From Cochin).
 Pattamadai mats (From Madras & Tirunelveli).
 Baskets (From Madras).

Stationery

Writing material.
 Books.
 Writing pads and envelopes (From Delhi).
 Pencils, pastels, crayons, black board, chalks and water colours.
 File cases, file covers, file boxes and blotting pads and painting material.

Furniture

Lacquered sofa sets (From Baroda).
 Leather morahs (From Bengal).
 Foot stools (Brass and Lacquered) (From Baroda).
 Cane chairs, table, waste paper basket (From Travancore).
 Carved wooden table (From Mysore, E. Punjab & Kashmir).
 Decorative table (From Baroda).
 Children furniture (From Delhi & Travancore).
 Furnishing material in running length (From Bengal & Gwalior).

Books

Books on Cottage Industries (From Bombay, Madras).
 Books on furniture designs (From Madras).
 Books of Government publications (From Delhi).

**HONGKONG FINANCIAL STATEMENT FOR SEPTEMBER AND FOR THE FIRST 6 MONTHS
OF FISCAL YEAR 1950/51**

General Revenue Balance as at 31st August, 1950		\$196,871,295.49
Revenue for September, 1950	\$17,985,550.80	
Expenditure for September, 1950	19,541,069.40	
Deficit for September, 1950		1,555,518.60
General Revenue Balance as at 30th September, 1950		\$195,315,776.89

HONGKONG REVENUE AND EXPENDITURE FOR THE FIRST 6 MONTHS OF FISCAL YEAR 1950/51

Heads of Revenue	Estimates 1950-51	Actual Revenue from Apr. 1st to 30th Sept., 1950		Heads of Expenditure	Estimates 1950-51	Actual Revenue from Apr. 1st to 30th Sept., 1950	
		\$	c.			\$	c.
Duties	39,300,000.00	34,864,212.58		H. E. the Governor	230,285.00	127,950.84	
Rates	21,518,000.00	13,631,068.69		Agricultural Department	813,135.00	342,205.58	
Internal Revenue	76,500,000.00	34,726,721.50		Audit Department	247,023.00	113,911.37	
Licences, Fines and Forfeitures	9,646,450.00	8,749,294.12		Civil Aviation Department	1,186,379.00	366,694.72	
Fees of Court or Office	16,977,830.00	12,111,361.41		Colonial Secretariat and Legislature	1,177,833.00	575,952.19	
Water Revenue	5,786,400.00	3,791,119.49		Department of Commerce and Industry ..	1,236,167.00	528,587.46	
Post Office	10,095,000.00	7,053,110.04		Co-operatives and Marketing:—			
Kowloon-Canton Railway	7,004,000.00	5,339,534.18		A. Fish Marketing Organization	79,322.00	25,465.95	
Revenue from Land Rents, etc.	6,201,100.00	4,992,489.24		B. Vegetable Marketing Organization ..	76,225.00	28,490.61	
Miscellaneous Receipts	7,790,000.00	8,895,853.71		District Office New Territories	383,208.00	184,403.10	
Colonial Development & Welfare Grants .	570,700.00	145,537.22		Education Department	5,443,781.00	2,166,757.21	
				Fire Brigade	1,382,027.00	561,045.70	
				Fisheries Department	106,641.00	66,529.08	
				Forestry Department	410,230.00	184,748.59	
				Gardens Department	341,487.00	150,196.76	
				Hongkong Defence Force:—			
				A. Hongkong Regiment	1,049,316.00	241,846.09	
				B. Hongkong Naval Force	568,567.00	75,022.59	
				C. Hongkong Auxiliary Air Force	123,400.00	14,426.22	
				Inland Revenue Department	889,555.00	397,089.76	
				Kowloon-Canton Railway	5,007,031.00	4,728,915.81	
				Labour Department	291,119.00	121,634.38	
				Legal Department	687,443.00	197,839.21	
				Magistries:—			
				A. Hongkong Magistracy	135,793.00	64,855.69	
				B. Kowloon Magistracy	114,509.00	58,681.83	
				Marine Department	6,169,258.00	1,791,055.40	
				Medical Department	12,668,351.00	5,777,306.62	
				Miscellaneous Services	37,521,500.00	27,458,089.63	
				Pensions	7,870,090.00	8,551,476.47	
				Police Force	15,553,762.00	6,823,228.07	
				Post Office, Broadcasting & Telecommunications:—			
				A. Post Office	4,195,644.00	2,262,270.19	
				B. Broadcasting	422,833.00	160,462.58	
				C. Telecommunications	955,979.00	34,045.15	
				Prisons Department	4,268,341.00	1,622,303.47	
				Public Debt	5,084,631.00	2,569,386.00	
				Public Relations Office	192,042.00	63,504.34	
				Public Works Department	5,434,368.00	2,174,315.89	
				Public Works Recurrent	16,633,000.00	5,759,708.92	
				Public Works Non-Recurrent	29,184,563.00	9,316,004.64	
				Rating and Valuation Department	212,259.00	89,597.56	
				Registrar General's Department	196,351.00	95,293.30	
				Royal Observatory	415,046.00	174,230.02	
				Sanitary Department & Urban Council ..	7,444,297.00	2,994,036.17	
				Secretariat for Chinese Affairs:—			
				A. Secretariat for Chinese Affairs ...	177,031.00	89,542.10	
				B. Social Welfare Office	766,341.00	748,366.93	
				C. District Watch Force	168,131.00	74,838.16	
				Statistical Department:—			
				A. Statistical Department	131,707.00	63,437.11	
				B. Registration Branch	297,560.00	266,315.11	
				Stores Department	5,564,002.00	1,652,051.34	
				Subventions	14,332,900.00	8,082,984.54	
				Department of Supplies & Distribution ..	832,349.00	351,075.64	
				Supreme Court	448,103.00	225,083.69	
				Treasury	801,347.00	387,825.65	
				Colonial Development & Welfare Schemes	570,700.00	207,363.10	
				Custodian of Property	42,156.00	20,145.60	
				Quartermaster Authority	204,199.00	88,052.50	
				Essential Services Corps	185,851.00	103,502.69	
				Co-operative Department	—	13,056.06	
Total Revenue	\$204,139,480.00	137,571,039.75		Total Expenditure	\$200,839,083.00	96,408,155.43	

HONGKONG COMMODITY MARKETS

The announcement of the closure of the Chase Bank in Hongkong had little influence upon the market, it being realised that the U.S. embargo upon trade with China and Hongkong was bound to have an effect upon American trade. After some stir over the U.S. advice to unessential citizens to leave the Colony, and the instructions given by the H.K. authorities for British nationals to register for essential service, the mercantile community decided not to become excited and business settled down to its normal stride pending further developments, if any.

Rising prices characterised dealings in practically all commodities. The main influences in this rise were the uncertain political situation, the knowledge that future supplies might be difficult to procure and the realisation that even if procurable indent prices from abroad would inevitably go higher.

Cotton Yarn

Prices on the cotton yarn market went soaring upward during the week, causes being: anticipated difficulties in future imports of cotton yarn from India following the rumoured prohibition by the Indian Government of exports of this product, the reluctance to release stocks, brisk buying by local mills and Burmese dealers, to say nothing of the inevitable speculator. Prices in some cases rose as much as \$100 per bale. At the close, prices were as follows: Shanghai yarns, with curtailed supplies limiting transactions except in 20's, were quoted at \$2000 for Flying Tiger, Blue Phoenix and Golden City, while \$1950 was asked for Silver Moon 20's. Indian yarns saw brisk trading in practically all counts, in 10's Gokak mills were quoted at \$1500 while J.K. brand sold at \$1480 and Mysore Spinning & Mfg. Co. at \$1470 per bale; in 20's, Madura Mills rose to \$2040 per bale, Cocatoo brand was offered at \$1950, Dawn Mills & Lakshmi Mills at \$1850, and Krishna Kumar Mills sold at \$1740 per bale; in 26's, J. K. brand was quoted at \$1800 and Hindustan & Co. at \$1820 per bale, while Flying Peacock sold at \$1820 and Loyal Textile Mills at \$1800 per bale; in 32's Kotak & Co. was offered at \$1920 and Madura Mills at \$2050 per bale, while Sree Meenakshi Mills sold at \$1935 per bale and closed at \$1965 on later sales. Hongkong 20's rose to \$2100 for Bat & Urn, Camel, and Double Swallow, while Flying Fish and Golden Peak rose to \$2150 per bale.

Cotton Piece Goods

The uncertainty over future supplies of cotton yarn as well as the lessened quantities received from Shanghai, caused prices to rise further. Trading was particularly brisk, although low stocks of Shanghai piece goods limited dealings in that direction. Japanese 2023 grey sheeting first sold at \$81 per bolt and later rose to \$84, while ABC rose to \$78 and Four Lotus to \$80 per

bolt. Shanghai Mammoth Bird grey sheeting sold at \$84 per bolt. White cloth was also active; Japanese Three Peaches sold at \$97 per bolt, Japanese Double Swan fetched \$85.50, and Japanese 2003 white cloth rose to \$86.50 per bolt.

Metals

Cancellation of orders for mild steel round bars by French manufacturers together with raised indent prices, as well as brisk buying by Chinese communists, sent prices upward. Orders from France which had been originally quoted at £42 per ton cif. Hongkong, were after cancellation later offered at £48 and even at £53 per ton. Mild steel round bars of 40' $\frac{3}{8}$ " to 1" rose from \$76 per picul (133.3 lbs.) forward price, on the local market, to \$80 per picul while spots fetched \$82 per picul; 20' to 22' $1\frac{1}{2}$ " up were dealt in at \$80 per picul. Mild steel angle bars also rose rapidly; $\frac{3}{4}$ " thick sold at \$78 per picul, while $3/16$ " thick $1\frac{1}{2}$ " and $1\frac{1}{4}$ " were quoted at \$80 per picul and $\frac{3}{8}$ " thick 3" at \$85 per picul.

Shanghai buyers were in the market for galvd. iron sheets and speculators were particularly busy with this line in view of the lack of supplies from Europe. G31 3'x7' rose from \$16 to \$17 per sheet, G24 fetched \$1.35 per lb., G26 stood at \$1.30 per lb. and G28 went up to \$1.50 per lb.

The prices of mild steel plates continued to rise during the week: 4'x8' $1/16$ " fetched \$120 per picul, and buyers offered up to \$105 per picul for $3/32$ " without finding sellers; $3/16$ " to $1/2$ " sold at \$95 per picul.

Zinc sheets also continued to show an increase in prices: sellers asked \$440 per picul for G6 spot, and \$450 per picul for G5, while G9 and G10 sold for \$480 per picul.

Industrial Chemicals

Industrial chemicals continued with brisk sales during the week and rising prices. With shipments curtailed through the U.S. export controls, dealers are negotiating with European manufacturers for increased supplies. On the local market quebracho extracts, used in curing leather, rose from \$1.70 per lb. to \$2.15, a record, while cargo afloat was disposed of at \$1.90 per lb. forward. Japanese 60% calcium hypochloride in 50 kilo. bags was greatly in demand on a specula-

tive market and rose from \$2.70 per lb. ex ship to \$3.75 per lb.; 70% calcium hypochloride fetched \$3.95 per lb. U.S.A. 75% calcium chloride in 130-lb. drums started at \$5.50 per lb. and closed at \$7 per lb. Granulated borax and borax crystals were greatly in demand with speculators entering the market as well as local factories: granulated borax (USA) in 100-lb. paper bags sold first at \$63 per bag, and selling offers later rose to \$70 but with reduced transactions as stocks were low; borax crystals (I.C.I.) in 1-cwt. bags rose from \$98 to \$115 per bag. U.S.A. caustic soda in 700-lb. drums started at \$330 per drum and climbed at the close to \$405 per drum, while I.C.I. 'crescent' caustic soda ended at \$410 per drum. I.C.I. 'hand in hand' sodium sulphide 5-cwt. packing opened at \$730 per ton and closed with sales at \$1100 per ton.

Fertilizers

Speculative purchasing sent up the price of fertilizers on the local market. Purchasers from China were also

active, although forwards were preferred by them. Japanese 'flower' brand 100-kilo. sulphate of ammonia sold at \$750 per ton forward; USA '66' brand 100-lbs. in gunny bag fetched \$705 per ton for spot and closed at \$730 per ton; Dutch 'cross axes' brand in 100 kilo gunny bag was dealt in at \$750 per ton; I.C.I. 'black moon' (100 kilo.) forwards sold at \$750 per ton.

China Produce

Interest shown by the United States in China produce, provided it is not supplied by the Communist authorities, kept the market steady during the week although transactions were limited by depleted spot holdings, the barter system having curtailed shipments from Canton considerably. Buying offers for woodoil (tungoil) received from Europe were at the rate of £245 per long ton for spot goods in bulk and £255 for spot goods in drums c. & f. European port. On the local market, some forward transactions took place at \$225 per picul; the closing rate was \$222 per picul. Teaseed

oil fetched up to \$235 per picul at the close, but holders were reluctant to sell in consequence of increased rates on the Canton market; the European offer was quoted at £235 per ton. Raised export prices in Canton for aniseed oil and cassia oil caused the price in Hongkong to go to \$1500 per picul for the former and \$3200 per picul for the latter, but these prices were too high for buyers.

Depleted stocks and limited arrivals restricted dealings in cassia lignea, traders being unable to fill all requirements on an active market. The price of cassia lignea (West River) 1-cwt. bale stood at \$100 per picul f.o.b., while the 80-lb. bale closed at \$98 and loose packing 2nd qual. sold at \$89 per picul.

Gallnuts were in demand for export to Europe, and transactions took place at \$130 per picul. Duck feathers and goose feathers with low stocks were quoted at \$680 and \$780 per picul respectively. Honan aniseed star had some transactions at \$147 per picul and closed at \$150 per picul.

Hongkong Trade Enquiries

ENQUIRIES FOR HONGKONG EXPORTS

Harada Sangyo Kaisha Ltd., 3, Andoji-Bashi-Dori, 3-Chome Osaka, Japan.—Cashmere Hair & Camel Hair.

Minori Tsuji, 21, 4-Chome, Honchij-Dori, Nakano-kis, Tokyo.—English Woollen Suiting.

M. Enam Elahi & Bros., P. O. Box 122, Dacca, E. Pakistan.—Agent in H.K. to handle Hides. Interested in local goods and in acting as agent for H.K. firms.

Hasney Trading Corp., Ferringhee Bazaar, Chittagong, E. Pakistan.—H.K. Cotton Yarn and Matches.

L. Ade Onas Trading Co., 32, Oke-Ijasi, Ijebu-Ode, Nigeria.—H.K. Products generally.

David Olovede & Bros., 41, Balogun St., Lagos, Nigeria.—H.K. Products generally.

Sammy, Christ & Sunday, 89a, Alakoro Marina, Lagos, Nigeria.—H.K. Products generally.

Joseph Ayuntunde & Bros., 41, Balogun St., Lagos, Nigeria.—H.K. Products generally.

The Egyptian Co., for Commercial Exchange, 14, Babel St., Port Said.—Wrist Watch Bands, Sun Glass, Sandal Wood and Tortoise Shell. Ivoryware, Walnut and Blackwood articles, mirrors.

Lawrence Seder (Export Agency) Ltd., 189, Regent St., London W.1.—Enamelware.

Electric General Office, 61, Vieille Chaussee, Antwerp, Belgium.—Torches and Christmas Decoration sets.

E. Waig Esq., Rochussenstraat 243, Rotterdam C.—Handkerchiefs, Scarves and hand-made D'Oylies.

Le Societe Francaise de Courtages et de Commissions, 3, Avenue Philippe Leboucher, Neuilly-sur-Seine, France.—Tung oil, Tea Seed oil, Rape Seed oil, Groundnut oil, Hemp seeds & oil, Vegetable Tallow—White and Green.

C. Redvers-Apsey, Argyll House, 4, Castletown Rd., Kensington W.14.—Silks.

Paley & Co., (Harbram) Ltd., 436, Ecclesall Rd., Sheffield, 11.—Wishes to export Cutlery to H.K.

Worters & Guthrie Ltd., 29, Mincing Lane, London, E.C. 3.—Agricultural tractors for disposal.

Keystone Tyre & Rubber Co., 18, Hill Park Rd., Fareham, Hants, England.—Wish to appoint agents for their remoulded Tyres. Details at this Office.

Jose' Ordono Lopez Alhama de Almeria, Spain.—Wishes to export Almerian Grapes.

Veillon & Cie, Rue Gohari, Cairo.—Raw Silk. "Eikomag," Dusseldorf-Benrath, Germany.—Manufacture steel fabrications for bridges, Halls etc. Concrete mixer Building windows etc.